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Specialists in English and experts in research methods, testing, and educational psychology considered problems of developing sound research for investigations in the teaching of English. The seminar was also concerned with the place of research in the current movement of instruction in English in schools and colleges. Fourteen documents presented at the seminar are transmitted. The report is an individual interpretation of the seminar, not a presentation of formally-approved group conclusions. It does not represent a general position so much as a synthesis of ideas and attitudes expressed.

Major topics discussed include: approaches to research in teaching, considerations in planning research, and the general areas of basic and applied research. The term "basic research" was applied to a wide range of questions requiring an answer before hypotheses about English teaching could be formulated. Suggested basic research in composition, reading, and literature is outlined. Applied research was employed to mean research concerned with evaluating actual teaching techniques and different classroom procedures. A list of about 30 problems in applied research is offered.

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A Report Prepared by
Louise M. Rosenblatt

RESEARCH DEVELOPMENT SEMINAR
IN THE
TEACHING OF ENGLISH

Held at New York University

February 27 - March 2, 1963

A Report Prepared by

Louise M. Rosenblatt
Seminar Director

Project # G - 009

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I. INTRODUCTION

The Research Development Seminar in the Teaching of English brought together specialists in English and experts in psycholinguistics, testing and educational psychology. Their primary task was to consider problems of developing sound research designs for investigations in the teaching of English. The seminar also threw light on the place of research in the current movement for the improvement of instruction in English in our schools and colleges.

The seminar was a logical step in the recent series of efforts to awaken the public and all of those concerned with English in the schools and colleges to the importance of such improvement. In 1959 appeared the report of the Basic Issues Conferences, held under the sponsorship of four major professional organizations in English--the American Studies Association, the College English Association, the Modern Language Association, and the National Council of Teachers of English. In 1961, the latter published *The National Interest and the Teaching of English*, which documented the state of English teaching in the United States, and made clear the need for support of programs of curriculum development and research in the teaching of English, similar to the aid being given to the sciences and the foreign languages. The establishment of Project English in 1961 initiated a program of Federal support, with research in the teaching of English an integral part of broad plans for the stimulation of curricular study and curriculum development. In response to this opportunity, the Conference on Needed Research in the Teaching of English met at the Carnegie Institute of Technology on May 5-7, 1962.

Further recognition of the importance of such research resulted from the Allerton Park Conference of some eighty chairmen or other representatives from college and university departments of English, sponsored by the University of Illinois on December 2-4, 1962. Resolutions adopted by this group declared that sound preparation of teachers of English is a responsibility of college and university departments of English, and that research would be required for the strengthening of the program in English. With this came the important affirmation that "research in teaching and in the instruction of teachers can contribute to the same ends" as research in the aspects of English usually considered as part of a liberal discipline. The resolutions also stated that "the teaching of English and research in teaching will profit from joint efforts by specialists in English, English education, psychology, and other areas."

The Allerton Park Conference reflects the emergence of a new trend in the profession of English. The need for a massive effort at improvement of all phases of instruction in English is seen to be the concern of the "liberal arts" expert in English. He is asked to revise the former sharp distinction between himself and the people interested in methods and materials of the English curriculum from kindergarten up. A reorientation of specialists in English toward these new responsibilities will be required.

The New York University seminar was most directly an outgrowth of the path-breaking Carnegie Institute of Technology Conference. These meetings brought together a large group of people from the fields of English, English education, psychology and testing, as well as school administrators and representatives of various educational organizations. Papers by specialists in English and English education, and reports of group discussions on elementary, secondary, and college English, as well as "multi-level" problems, presented extensive lists of subjects for research. Papers by psychologists and specialists in testing treated the methodology of educational research. The proceedings, Needed Research in the Teaching of English, prepared by Erwin Steinberg, (U. S. Department of Health, Education, and Welfare, Cooperative Research Monograph No. 11) provides a broad overview of unanswered questions and recurrent problems in the field of English teaching. After this much-needed general conspectus, a valuable next step, it was felt, would permit a small group of scholars and teachers in English to sit down with specialists in research design, educational psychology, and tests and measurements, to work together on problems in research in the teaching of English.

The Research Development Seminar in the Teaching of English met at New York University on February 27, 28, March 1 and 2, 1963, with support from the Cooperative Research Branch of the Office of Education. The seminar sought to carry forward in more specific and concrete ways the recommendations of the Carnegie Institute of Technology Conference on Needed Research. Out of the profusion of questions and problems clamoring for solution which the Carnegie Institute report presented, a few specific problems were to be selected, and appropriate research designs were to be devised, in an effort to arrive at some useful formulations concerning research methodology and research design specifically in the field of English teaching. The preparation of research proposals for submission to any agency for support was not envisaged.

The planning of the seminar was strongly influenced also by recognition of the need to orient specialists in English "content" toward educational research methods. Professor John Fisher was especially interested in the contribution that the seminar might make to this. His cooperation in large part made the seminar possible; it was he who persuaded this busy group of people to hold four days open for the meetings.

The seminar met as a whole for three sessions, before dividing into groups of two or three for work on specific problems. The whole group met again on the final day to discuss the documents produced and to decide on the general nature of the present report. The major areas to be treated, and some of the major emphases, were outlined. There was not any opportunity for a review of the documents produced at the seminar. Nor has there been a review of the present document, which has been prepared by the Seminar Director with the aid of transcriptions of the various sessions. Despite the effort to eliminate any personal bias, this report must be recognized as an individual interpretation of the seminar, rather than as a presentation of formally-approved group conclusions. The report does not represent a general position so much as a synthesis of ideas and attitudes expressed.

II. APPROACHES TO RESEARCH IN TEACHING

Before the more specific outcomes of the seminar are presented, a review of some phases of the exploratory discussions may provide indications of the intellectual climate within which research in the teaching of English will probably have to be carried on during the coming period of reappraisal and reform.

The Problem of Priorities

The unanimity of the members of the seminar concerning the need for the improvement of instruction in English did not produce a similar unanimity concerning the relative importance of research in this area. Some of the participants felt that, given the present status of English teaching in the United States, certain other kinds of interests and activities must take priority over the approach through research. Emphasis on research and research techniques, and the channelling of large sums of money into research projects in the teaching of English, might even siphon off energies and funds that would more beneficially be applied to the direct solution of practical problems in the schools and colleges of this country.

Several of the participants, for example, both in written statements prior to the seminar and repeatedly during the opening sessions, placed the highest priority on the question of teacher preparation. As a member of the seminar said, "The one thing that would do most to improve the teaching of English would be to take steps to help the people teaching English know more about what they are teaching. When surveys show that half or more of the people teaching English are not prepared to teach it, how can there be serious argument about where we ought to direct our energies first. Research might be able to develop more sophisticated ways of teaching parts of the subject-matter of English, or substitute more valid subject matter for what is now being taught; but the primary need is for a massive program of institutes for the retraining of teachers of English now in the schools." Much needs to be done also to improve the calibre of teacher-preparation curricula in the colleges. Federally-supported institutes seem the only answer, and nothing that this seminar might produce, this member felt, should be permitted to divert attention from that major need.

Priority was also urged for curriculum development in English. Various types of curricular improvement were cited that need not necessarily wait on results of future research. For example, much could be done to revise existing curricula in the light of the current state of knowledge in linguistics. A major problem such as the poor quality of English textbooks also seemed less to need solution through major research projects than through the application of "common sense" by teams of school and college people of high competence.

Skepticism about "Quantitative" Research

Moreover, a certain attitude of skepticism about the potentialities of research in English teaching manifested itself at times even in this group committed to working on problems of research design. "Research" in these instances tended to be equated with "quantitative" or statistical method. The most frequently-expressed doubt took this form: Would not the demand for research problems amenable to quantitative handling lead to testing for variables that might be easily measurable, but not very important from the point of view of the teacher in the classroom? Would not research problems and research designs be tailored to fit the limitations of statistical method rather than spring from the live concerns of the profession itself? There might be a pressure toward "quantitative research" even when it was not most useful. Some skeptics, it was said, query further whether research projects are not in actuality nothing more than "elaborate means of bolstering" or establishing "what we already quite simply know about the teaching of composition or literature."

In the seminar, these views were aired mainly for possible refutation or correction. But it was agreed that such attitudes are prevalent in the English profession. One member of the group spoke of "English teachers' hostility to quantitative methods when applied to the teaching of English," and attributed this to some extent to "English teachers' ignorance of psychology and of research design." At any rate, the usual scholarly disciplines associated with the field of English do not foster a receptivity to experimental or statistical methods. A pamphlet on research design and research methods appropriate for investigations in the teaching of English was suggested as a way of stimulating such research by English teachers and professors. But the typical scholar's or teacher's prior training, it was objected, would probably not enable him to find within the limits of a brochure sufficient preparation for sound research in teaching. The seminar agreed that if a current of productive research in English teaching were to be developed, some process of reorientation or perhaps reeducation of the profession would be required.

Toward a Rationale for Research in Teaching

Thus, the seminar was challenged to develop a rationale for research in the teaching of English, without taking much for granted. Out of the interchange, the questions and challenges, the discussion of various problems that seemed to one or another member of the group to be particularly important, certain themes and a certain pattern started to emerge. Without an attempt to reproduce the actual flow of the discussion, or to do justice to the many observations on problems in the teaching of English, the major points of view will be reported. The all-too-brief duration of the seminar, and the number of problems subsumed under the heading of research in English--in addition to the diversity of approach, training, and interest of the members of the seminar--did not permit any formal agreement on specific points. Instead, by the end of the meetings, the group was able to recognize certain major topics or points of view that had been recurring, and to see several different types of research in the teaching of English as possible and necessary. The present report reflects the consensus of the group, then, concerning the major divisions of the subject.

First of all, the teacher who works with a group of students and "knows" that he is successful, still must recognize that he is basing his opinions on personal impressions and criteria. He still has to decide how much his practice is simply tradition and unchallenged routine, and to discover what is or is not actually effective. Witness the extraordinary variety of practices in the schools and colleges. The experts in composition who met at Ann Arbor in 1962 to plan a summer institute course in composition, for example, held so strongly to divergent views concerning the best approach that two syllabi had to be adopted. Those who are concerned with creating higher standards or developing new sequences of study or new techniques for teaching must avoid mere impressions and prejudice or invalid generalizations from special situations. Some systematic and critical basis for judgment is needed. The effort has to be made to see what kinds of research in teaching might be profitably and effectively carried on by members of the English profession, both with and without the aid of the research specialist.

The fear that efforts to stimulate or subsidize research in the teaching of English might compete with other types of effort to improve English instruction was countered by the view that research has a rather complex relationship to improvement in the competence of teachers or revision of the English curriculum. Interest in research requires, not competition with, but reinforcement of, efforts to improve the competence of people now teaching English. The more people teaching English with a measure of genuine expertness, the greater the likelihood of research projects worthy of support, it was claimed. Competent people will tend to develop and try out new ideas and techniques. A firm substratum of informed interest in teaching would thus be likely to give rise to significant research problems. If the profession as a whole provided a richer environment of lively and informed thinking about problems of teaching, probably the calibre and usefulness of the research would improve.

Reciprocally, it was argued, an important benefit of any large-scale and ambitious research project might be its effect in stimulating the interest of high school, college, and university teachers in problems of teaching. One member of the group spoke of "the education involved in getting, say, forty teachers in forty universities or 120 teachers in 120 high schools to carry out a carefully-thought-through program for teaching college composition or sophomore English in the high school. Even if the tests turn up no significant differences, the money will be very well spent because it will get college people and high school people together, it will put good programs into the schools and colleges, and there will be information about good teaching practice disseminated throughout the country."

Another member of the group, although he termed English teaching "part science and part art," agreed. "Not that a small enterprise might not reveal as much, but simply that nothing other than a massive experiment will be given serious attention. It now seems to me that the first obstacle to research in the teaching of English is the general (and, so far, generally justified) indifference among teachers to the results of research. Only a fully accoutered study will in the present climate have any chance of affecting pedagogy very greatly."

In short, the salutary effect of fostering research activities was seen as potentially broader than simply the findings arrived at. The experimentation would create an incentive toward interest in the possibility of alternative teaching approaches, practices, and materials. Moreover, the effort to work out experimental designs and to arrive at some method of measuring results requires a much more stringent thinking-through of aims and outcomes and of ways of testing them than is usual in the normal teaching situation. Awareness of the need to look for long-term as well as short-term results would also be more likely. Thus, an experiment can be viewed as also a kind of demonstration and a pedagogical device for disseminating sound practices and critical thinking about teaching.

A valuable context for the development of a successful program of research in the teaching of English was therefore seen to be the creation of a professional group of English teachers highly competent in their field and interested in the problems of teaching. In an atmosphere in which teachers would be developing new ideas and evaluating traditional and new practices, meaningful research would be more likely to be generated, and the findings of sound research would be more likely to receive serious attention and application.

Considerations in Planning Research

In the course of the discussion, the group touched on a number of the considerations involved in planning research in English teaching. Failure to take one or another of these into account explains why much research in this field has been found trivial or inconclusive. The points involved usual concerns of research methodology--the formulation of a clear hypothesis, selection of the subjects, the "treatment," the definition of outcomes, the development of sound ways of testing or measuring them. The discussion is summed up briefly here largely because these problems were phrased specifically in terms of the English classroom, and because awareness of these problems was the background for the matters reported in the following chapters.

To isolate precisely what is being studied or tested is, of course, essential. Current concern with delimiting "English" tends to focus on language, literature, and composition, or, frequently for the pre-college years, speaking, reading, writing and listening. Yet, as one member of the group put it, to speak of testing the effectiveness of a method of teaching "composition" is somewhat like speaking of "mathematics" as a whole. Various particular kinds of operations are involved or assumed under those headings. For example, people may mean very different things by "improvement in expository writing." The Educational Testing Service study of factors in literary judgment revealed the diversity of the criteria that may be applied to a piece of writing.

Again, to speak of a command of grammar is too general. There is the question concerning what grammar is being taught--traditional, structural, transformational, etc. In addition, "command of grammar" may mean ability to analyze, to apply some system of categories and to name structures, or the ability to use language in accordance with appropriate usage.

Similarly, if there is a study, let us say, of the effect of class size on the teaching of "literature," it becomes important to ask what is meant by the term "literature" in that situation. It may mean, for example, the learning of information about the author, the literary work, and the social or historical background, or it may mean learning to grapple with the text and to make something of it. Clearly these aims or outcomes would require very different kinds of testing and would differ also in the ease with which they could be tested.

The importance of identifying the teaching methods being studied was also stressed. In the teaching of composition, for example, it may be necessary to specify practices, such as discussion of the topic, the extent to which help is given during the actual writing, the kinds of comments made on the completed paper, whether emphasis is on substance or on rhetorical principles, the kinds of topics selected, the order in which they are assigned.

When students manifest improvement in ability to write compositions, many different elements in the teaching situation may have contributed to this. The school environment, the personality and degree of enthusiasm of the teacher, the personalities and educational and social background of the students, their differences in intelligence and emotional maturity--such are hypothetical factors that the research design seeks to study or to "control."

Change tends to come about slowly in the competencies associated with English. This, again, is often neglected in planning research. Moreover, any teaching method may have varied outcomes. For example, it may be that a method of teaching reading will produce greater success in oral reading and could improve spelling, but at the same time might be detrimental to achievement in reading in subjects which require rapid silent reading. Similarly, it might be possible that students could be helped to achieve a high degree of competence in reading and explanation of the classics, and yet the methods used might ultimately be unsuccessful if measured by the pragmatic test of whether students are stimulated to continue to read for themselves. The very fact that the student in any experimental project is after all being exposed to all sorts of language and reading situations in the home, the school, the television, the newspapers, and mass media represents still a further complication. Also, the simple process of maturing itself seems often to bring with it a growth in language ability, no matter what the school or teaching influences may be.

There remains the problem also of the scope or generalizability of particular research studies. The tendency is, of course, to seek highly generalizable answers. Perhaps, it was suggested, as important as answers of nation-wide applicability are the kinds of knowledge that will enable the teacher and the school to adapt very different techniques to the needs of students of different temperament and background.

Many of the points made during this discussion of elements in the teaching situation are the usual concern of the research expert, and would be phrased in terms of controlling the internal and external validity of the research design. Such general aspects of educational research need to be spelled out specifically for research in the teaching of English. This would undoubtedly reduce the effort wasted on research which neglects some "confounding factor." On the other hand, knowledge of more recent thinking and developments in research methodology (such as are reported in the newly-published Handbook on Research in Teaching), and awareness of how it can provide ways specifically of dealing with the complex English classroom situation, should tend to create a more receptive attitude toward initiating needed and feasible research projects.

The seminar's explorations of such aspects of the development of sound research design illuminated an important point: the need, especially for the field of English teaching, to recognize the potential contribution of a number of different types and "levels" of research.

III. BASIC RESEARCH

The seminar found useful the distinction between "basic" and "applied" research. The latter term was employed in the usual sense--by analogy, for example, with applied physics--to denote research concerned with evaluating actual teaching techniques and ascertaining the effect of different classroom procedures or curricular arrangements. The implications of such research for the classroom would tend to be fairly clear and direct.

The term "basic research" was applied to a rather wide range of questions requiring an answer before hypotheses about English teaching could be set up, or perhaps before the outcomes aimed at in the English classroom could be defined with sufficient precision to permit precise evaluation. In one sense, of course, the whole "content" of English as a subject might fall within the category of basic research. For example, the preparation of scholarly editions of American authors might be considered basic. In the most usual sense, "basic" implies "pure" research, free of any concern for future applicability. The seminar's use of the term reflects this, but the members were interested in pointing out that some basic research, aimed at knowledge or systematic theory valuable in and for itself, would at the same time yield results valuable as a foundation for more precisely formulated and significant research problems in English teaching. Many of the difficulties of research in English teaching discussed in the preceding section grow out of the need for such basic knowledge or theory.

A Theoretical Framework

The wealth of valuable suggestions for needed research offered at the Carnegie Institute conference gave rise to two types of comment that imply the need for basic research. On the one hand, it was pointed out that many of the questions were phrased in terms of methods of teaching "composition," the "appreciation of literature," the understanding of "grammar,"--terms much too general to make clear what outcomes were envisaged. On the other hand, one research specialist's reaction to the proceedings of the May conference was, "Many names are used in the proceedings to refer to various aspects of achievement in English. The number of relatively independent skills and abilities is certainly much smaller than the number of names, but we do not know what they are." He suggested the need for "identifying the major dimensions or aspects of proficiency in English, perhaps by factor analytic methods."

An important contribution to the improvement of research hence would be the strengthening of the theoretical framework on which research depends. Efforts at definition and elucidation of the various outcomes aimed at in "composition" or the teaching of "literature" leads, of course, into problems in rhetoric and the theory of literature. The need for more strictly defined, theoretically cogent research problems reveals also the paucity of the kinds of knowledge out of which fruitful hypotheses spring. Basic to this would be understanding of the kinds of linguistic behaviors implicit in the usual critical phrasings.

Much more, for example, should be known about stylistics--the linguistic habits or patterns of "good" writers, represented, say, in twentieth-century prose, or the different types of patterns associated with different levels of student writing in college composition classes. To discover what syntactic structures recur, and in what combination, with, say, types of intensive adjectives and adverbs, or with certain types of logical weakness would, for example, be interesting in itself. It could also provide the basis for devising new teaching exercises and practices--i. e., for setting up hypotheses about the potential relationship between certain methods and the development or elimination of certain linguistic behaviors.

Studies in linguistics represent another area of research, basic in the sense that it needs no justification outside itself, yet which may yield knowledge that will permit significant hypotheses about teaching composition and literature. Another such area of basic research concerns the ways in which the individual acquires the language, or how, e. g., a speaker generates a sentence.

Jerome Bruner's The Process of Education has stimulated interest in another facet of basic research, and related it to practical education. The materials and specific areas of the field of English need to be studied to discover whether there may not be an identifiable set of basic concepts or principles on which the structure of the subject rests, and which recur on increasingly sophisticated levels. If such pervading ideas and attitudes can be determined, sequences of ideas or language tasks might be set up which would be appropriate for students at different levels of maturity and linguistic competence.

The Nature of the Teaching Process

Another kind of basic clarification has strong practical overtones. Without necessarily evaluating, this would focus on the nature of the interactions and the situations present in the English classroom. How do young people in our culture come to participate in its literary institutions? What are the operations involved in the inductive and deductive approaches to grammar or to literary criticism? What assumptions about the learning or the teaching process are involved in the use, say, of models of expository prose in the composition course? Basic analysis of the interactions through which students are being led both inside and outside the classroom (in relation, e.g., to the mass media) could contribute to the sociology of literature. It would also facilitate setting up of more refined controlled situations or correlational studies for testing the effectiveness of teaching techniques.

Suggested Basic Research in Linguistics

Although under the rubric of "Basic Research" the various divisions, such as language, literature, and composition, obviously overlap in many ways, the following proposals may be grouped together as centering primarily on basic knowledge or basic theoretical understandings concerning linguistics and the acquisition of language.

1. A descriptive grammar of modern English, on the scale of the grammars of Jespersen, Poutsma, and Kruisinga, but making use of the methods and theories of modern linguistics.

(A project related to this is being carried on at the University of London, under the direction of Randolph Quirk. But we need more than one such effort. Properly done, this would be a very large project, occupying the full time of several trained linguists for several years.)

2. A thoroughgoing statistically-based study of the relationship of the writing system of English to its phonology.

A study of this sort is of highest priority in the field of research and development of materials for the teaching of reading. It should be based on a large sample of current English, and should be carried out by a researcher who is thoroughly familiar with descriptive linguistics and statistics. Undoubtedly it should make use of a computer.

Prerequisites for the study are the availability of a large corpus of present-day English in both orthographic and phonemic transcription on magnetic tape for computer use. A program for converting graphic English to phonemic transcription would be an almost indispensable part of the study.

(Brown University, under a grant from the U. S. Office of Education, is at present preparing a corpus of 1,000,000 running words of present-day American English, divided into 500 samples of 2000 words each, drawn from a wide variety of sources. This should be ready in about a year's time. A graduate student at Brown is undertaking the preparation of a graphic-to-phonemic conversion program as a Ph. D. thesis. Funds would be needed, however, for additions to the Brown computer installation and for computer time.)

3. A dictionary of English morphemes.

4. A factor-analytic, developmental study of grammatical and writing behavior in grades 4-12.

Previous studies of the relation of grammar to English composition (See I. Strom, "Research in Grammar and its Implications for the Teaching of Writing," Bulletin of the School of Education, University of Indiana, vol. 36, Sept., 1960, 1-21) have failed to show any relationship because they have not measured truly relevant aspects of either grammatical knowledge or composition performance.

It would be, in any event, possible to distinguish a number of separate aspects of behavior in the domains of both grammatical knowledge and skill, and composition performance, such that there would be a greater likelihood of finding a relevance of one to the other either in correlational studies or in experimental studies of the effect of grammar teaching on composition performance.

The results of this study would suggest what phases of language and grammar instruction are of most relevance for the teaching of composition. They might also suggest what methods of teaching might be most effective.

5. Knowledge of how a sentence is generated, as the basis for developing teaching methods. A study of the process by which the native speaker generates sentences. This is not a study simply of how native speakers acquire the grammar, but rather, "how we generalize grammar in ourselves from a limited experience of language... When you decide to say something, what happens? Do you have a set of things inside you that you prepared, do you plan the sentence all the way ahead, or do you start in at one end without any idea of what is coming out at the other? How much individual variation is there in this kind of practice, etc., etc." This is fundamental research that should be carried on cooperatively by psychologists and linguists.

6. A longitudinal study of the language development of children through the twelfth grade. A study of the stages of development in the individual of increasingly complex language patterns and vocabularies; the order of development of language patterns and vocabularies in spoken English.

7. A longitudinal study of the relationship between the spoken and written language of children through grade twelve.

8. A study of the relationship between the spoken and the written language with particular attention to kinesics, that is, to the ways in which what in spoken language is communicated by expression, gesture, intonation, rhythm, etc. is communicated by the written symbols.

Suggested Basic Research in Composition

A number of the proposed studies center about, or are fundamental to, composition. Some of these would contribute to insight into what constitutes good writing in the twentieth century, or to the theoretical framework within which the various kinds and forms of expression are to be viewed. Also, just as we do not simply speak of the teaching of mathematics, but break it down into operations such as addition or multiplication and beyond that into the operations and concepts involved in these, so a similar analysis needs to be brought to bear on all of the kinds of activities that enter into composition. Even those teachers who, through sound training and literary ability, are able to recognize a good piece of writing, to point out the qualities of good prose, often still do not understand the process that the writer has had to go through in arriving at a particular piece of good prose or a well-written paper.

Following are some of the specific studies suggested as basic research related mainly to composition:

1. A comprehensive study of modern expository prose style. An examination of the syntactic characteristics of good (factual as opposed to imaginative) modern prose as compared with syntactic characteristics of 18th or 19th century prose. This would have value in guiding current rhetorical theory and instruction.

2. (a) A study of the development of the English paragraph (especially in factual prose) from 1890 to the present. (b) The same kind of historical study of the modern sentence.

3. The re-examination of the subject of rhetoric for the purpose of developing a sound modern rhetoric. ("until one is written, we shall continue to mix Aristotle with Cicero with Quintilian with Blair with Barrett Wendell to the benefit of no one.")

4. A descriptive study of the process of theme-writing in good and poor theme writers.

How do students approach the task of theme-writing? How do they plan and organize their thoughts, if at all? How do they develop their plans?

How do students draft themes? What kinds of rewriting do they do?

Are there conscious elements of design in students' performance? E. g., do students consciously try to vary sentence patterns, worry about antecedents, work out from topic sentences?

In what ways are students sensitive to the demands of the setting in which theme-writing occurs? E. g., are they responsive to considerations of communication to a particular audience? Do they ponder problems of explanation, definition, and problem-solving in the intended reader?

5. Operational analysis of the production of competent pieces of writing. This would involve the kinds of processes which would precede the actual writing and which would come into play as the various versions of the composition suggested themselves. E. g., observing, gathering information, moving from facts to some generalization, seeing similarities and differences or cause and effect--operations implied in the usual statements concerning themes having a main idea, or paragraphs being organized in one way or another or having a topic sentence.

6. Studies might be made of the ways in which competent writing is produced. For example, the conditions under which a selective process is set in motion for arriving at the subject, the attitude toward it, the effect to be produced upon a reader, the kind of personality or persona that the writer seeks to evoke, etc. Such research might include both case studies of individual students and large-scale analyses of student themes written under different conditions. Rough drafts and completed papers written during a term by an entire college freshman class might provide a useful body of data for such study.

Suggested Basic Research in Reading and Literature

Various kinds of studies were suggested that would explore the nature of the reading act, the relationship between reader and text, the development, in other words, of a systematic view of the processes involved in reading, and especially in the reading of works of imaginative literature. Such basic research, it was felt, would make possible clarification of the nature of outcomes desired, refinement of ways of measuring these outcomes, formulation of hypotheses concerning the possible effect of various teaching techniques, and development of research designs for testing such teaching methods.

The weakness of much past research on the teaching of reading, members of the seminar pointed out, was due to lack of certain kinds of basic information. A study, for example, of the writing system in relation to the English language such as is suggested above, would be of great importance for the teaching of reading. Much of the research in the structure of the English language and the ways in which a feeling for the English sentence is acquired also would be highly relevant to problems in the teaching of both composition and reading.

Mentioned repeatedly throughout the seminar was the need for a new, more fully developed, theory of literature. This would provide a framework for a more systematic teaching of literature than had been possible in the past. Some of the kinds of understanding mentioned had to do with the activities carried on by the reader in the actual evocation of meaning from the printed page: How does the reader come to select, relate, and organize responses relevant to the text? What self-corrective processes go on? The linguistic abilities and aesthetic expectations necessary for the reading of various kinds of imaginative literature should be analyzed. What relationship is there between the personality of the reader and the kind of experience and reaction to the experience achieved through the text?

Such questions lead into a concern for finding out more about the growth of the capacity to understand and to appreciate literary materials. At what levels do students have the capability or potentiality for insights into the nature of literature or for certain types of response to a literary genre? What are the factors that influence the interest in reading works of imaginative literature? Many problems of sequence in the teaching of literature cannot be solved in a highly precise way or in any very generalizable way until more studies have been carried on of the relationship of the past experience of the reader, social, psychological, and linguistic, to different kinds of literary materials. We need to study the relationship between reading and other media, and in the context of what is known about the psychological and social development of children in our society.

Different kinds of literature teaching assume different theories of the nature and function of literature. Systematic studies of the alternative views of major problems in the theory of literature would provide a basis for elucidating their implications concerning relevant teaching methods. Approaches to a literary work as representative of a particular period or literary movement, as a document in the biography of the author, as illustrating a literary category, lead to very different kinds of teaching and testing procedures from, say, emphasis on the students' ability to develop the capacity to read and interpret the literary work for himself. To speak, for example, of testing the relative efficacy of the teaching of literature by television as against the usual classroom procedure is meaningless unless it is made clear whether one or another approach to literature has been tested for.

Associated with the problems concerning the development of the capacity to interpret literature and the elucidation of the nature and functions of the literary experience, are the questions concerning the intellectual, emotional, and social maturity necessary for the assimilation of various kinds of aesthetic concepts or awareness of literary genres. In this general area, for example, arise questions such as whether there are growth factors that must be taken into consideration in attempting to develop a feeling for such things as figurative language. In literature, as in the study of grammar, the whole question concerning the value of an analytic approach, in terms of systematic categories of genres and literary techniques, needs to be studied. Perhaps here we are at the merging point of basic and applied research in this field.

During the discussion of such questions in the seminar, it was not assumed that the profession necessarily had to arrive at a single unanimous answer to these various theoretical problems. There might, for instance, be very real differences in the answers given to the question concerning the function of the reading and the teaching of literature. The alternative positions should be made clear, however, so that the particular outcomes aimed at in particular situations might be understood. Similarly, the actual techniques or practices involved in the teaching itself would need to be spelled out, as in the illustration earlier concerning approaches to literature. In this way both the outcomes and the "treatments" could be specified with some precision.

The following basic studies for reading and literature were suggested:

1. A theoretical study of the writing system in relation to the English language.

2. Studies of the reading process as it is carried on with different kinds of literary materials, especially imaginative literature. This would require studies of readers of different kinds, differing in age, intelligence, socio-economic background, educational background, etc. The purpose of such studies would be to develop a fuller understanding of the activities involved in the reading act. The kinds of difficulties or blocks encountered by different types of readers in relation to different types of literary materials would be studied. I. A. Richard's Practical Criticism is a pioneering work of this kind. (Some of the other suggestions in this section elaborate one or another phase of the general problems stated here.)

3. A study of the relationship between the speaking vocabulary and the reading vocabulary at the various age- or grade-levels.

4. An investigation of the kinds of literature a child reads spontaneously at various ages.

5. A study of children's capacity to understand figurative language and an investigation of what are the stages in the development of the capacity to perceive symbolic statements which are not on the surface of the literary work.

6. A study of the factors involved in the transition from juvenile to adult reading. This would investigate the current indication of a rising curve of interest in the reading of self-chosen books, which reaches a peak at about grade 8 and declines with each increment in age and education until adulthood. A wide range of factors hypothetically affecting the acceptance or rejection of adult literature would be studied, e. g., the differences in vocabulary of juvenile and adult works, the impact of unfamiliar ideas and emotions, the relationship to human situations and kinds of personalities remote from their own experience, the handling of the relationship between the fictional and the real, in fact, the whole concept of the literary work as an aesthetic construct, the influence of media such as the movies or TV, the possible role of a transitional literature, the effect of the whole maturational process.

(Obviously, a massive study of a problem such as this would be desirable. It does, however, offer many hypotheses that could be dealt with in individual studies and experiments.)

7. A great many basic studies should be made in order to throw light on the relation between the reader's personality, past experience, and social and literary preconceptions and various kinds of literary works. Not only the degree or level of comprehension required by particular literary works, but also the factors leading to distorted views of, e. g., a novel, need to be understood in much greater detail if ways of developing the capacity to carry out a full and competent or adequate reading of a literary work is to be achieved.

8. Assuming that certain basic concepts, genres, or literary modes can be isolated, careful analytic studies of literary works should be carried on for the purpose of establishing whether literature can be seen as presenting an increasingly demanding or sophisticated sequence. This would involve

a study of, say, increasingly sophisticated use of metaphor. Such a factor would have to be studied in relation to the other kinds of linguistic abilities demanded of the reader by each work, and also the intellectual and emotional understanding or experience required.

Problems of Basic Concepts and Sequence

Certainly of all the subjects in the curriculum, the various uses of language intimately involve the whole person. Hence, many of the questions about the teaching of English or about the subject, whether the acquisition of the structure of the language, ability to use it in spoken or written communication, or ability to interpret the written or printed word, translate themselves into questions about the intellectual, emotional, and social experience of the individual. Growth in language ability has to be seen as a continuing process involving the development of habits and attitudes, and dependent on broader aspects of thinking and emotional maturity.

Recent emphasis on a sequential curriculum in English reflects the need to see every phase of the English curriculum in relation to what has preceded in the student's experience and growth, and what is to be anticipated as the next steps towards which he should be led. Much of the basic research suggested above in language, composition, or reading and literature either phrases some aspect of this problem of sequential development of language abilities, or would contribute to the kinds of clarification needed before such a sequence can be developed in any other than an arbitrary trial-and-error way.

Two types of basic questions are relevant to this. One has concerned the growth of mental and emotional capacities in the individual. Questions having to do with the process of acquisition of the structure of the language, the psychology of generating sentences, the acquisition of ideas of time, cause and effect, (as related to acquisition of the linguistic means for expressing such ideas through the structure and vocabulary of the language), questions concerning the emotional and experiential readiness of the individual to appreciate such literary modes as satire or tragedy--all such questions focus attention on the continuing maturation of the individual and the very complex relationship of language activity to the mental, emotional, and social development of the individual. Much of the basic research mentioned during the seminar implied an effort to determine the growth factors that must be taken into consideration in planning any sequence or hierarchy of skills and abilities in the English curriculum.

Parallel with this were the suggestions for basic research that were aimed at the structuring of the various areas within the field of English itself. Except for the area of the actual structure of the language itself, the general feeling seemed to be that the discipline of English did not easily fit the analogy with the field of mathematics which Jerome Bruner had made the basis for his call for the development of sequential structures in all disciplines. Nevertheless, this was considered to be a very important area of basic research, since the development of a more orderly view of the whole field of "English" seems imperative.

Suggestions ranged from the specificity of such tasks as the analysis and interpretation of literary works of merit appropriate for readers from the elementary grades through the high school, to the identification of works of increasingly difficult technical character, as in the use of metaphor and symbol, or the explication of the different levels of sophistication appropriate for the reading of a single literary work such as, for example, Huckleberry Finn, in the elementary, high school, and college classroom.

An even more basic kind of inquiry is concerned with the effort to determine whether there are certain "principles" or "concepts," to use Bruner's terms, which are central to the whole field or to particular aspects of the field of English, and which, encountered first in simplest form, would appear and reappear in a spiral of increasing subtlety and complexity throughout the whole field.

From the suggestions concerning a systematic theory of communication or a theory of literature or a new rhetoric, the identification of such basic and recurrent concepts could probably result. In fact, the assumption is that much of the activity in these areas would be concerned with the effort to arrive at such basic principles or concepts. It was suggested, moreover, that the definition of the term "concept" for these various investigations would itself be important. Should a term such as "tragedy," which Bruner had used to illustrate a point, be accepted as indicating the kind of concept to be identified, or should the search for basic concepts not start rather with such ideas as time sequence or the process of arriving at a generalization from particulars? Several members of the seminar devoted a few of the hours at their disposal to exploration of how a structure of ideas might be identified that would provide the foundation for constantly broadening and deepening participation in the language and the written culture.

The illumination of these matters does not always move from basic research toward the area of applied research. Efforts to solve practical teaching problems may contribute much to the clarification of questions concerning basic and developing concepts. Concern with developing methods for teaching composition, for example, had led two members of the seminar to devise exercises that are actually methods of developing an understanding of a basic concept. One started from the outcome desired, which was that students should write papers that have a main idea that "hangs together." In terms of the writer, then, this meant that he needed to have a "sense of the whole thing he's doing, a grasp of the whole thing before he starts, so that he has some controlling notion that will govern his principles or positions." Exercises were devised in which the students were led through the experience of arriving at a generalization about, or growing out of, seemingly disparate or incongruous materials. The guiding concept here seemed to be the idea of congruity in incongruity. The problem of finding a unity among things that appear superficially to lack such unity, was presented to each of the levels from ninth through twelfth grade, with materials of different levels of complexity and disparity. For example, twelfth grade youngsters were presented with disparate materials such as a photograph, an advertisement and an essay. They were able to arrive at such ideas as "a notion of simultaneity," and "a relationship between observer and observed." This exercise thus became a little model of the process of seizing a problem or a general idea before they could write about it. A simpler illustration was a set of exercises for the seventh grade directed toward deriving a general idea or relationship from a group of objects set before them.

Whether the exercises just described actually are good teaching devices still remains to be answered. Applied research would test whether such exercises ultimately are reflected in better organized or more precise writing--whether they carry over or transfer to general habits of composition. But it is clear that the search for new teaching methods and devices stimulated an analysis of basic processes and concepts. The setting up of sound experiments in teaching also requires clarification of outcomes and procedures. Such identification of basic operations and the building up of research information about them may contribute to the recognition of a structure of recurrent concepts in English teaching.

The items which follow indicate some of the ways in which members of the seminar phrased problems involving fundamental matters such as sequence and basic concepts or controlling principles.

1. What is the applicability of Bruner's ideas of concepts and structure in The Process of Education to the teaching of English? What is a "concept" in language, in literature, in composition? How does one identify "concepts"? Is identification of concepts a subjective matter or are there relatively objective ways of arriving at individual concepts? Are students ready for certain concepts at certain ages, i. e., what is the relationship between maturity and the ability to grasp certain concepts? If there are such things as basic, recurrent concepts in language, literature, and composition and if they can be agreed upon, can experiments be devised to determine whether using the concept approach in teaching is effective?

2. Is it possible to identify "principles" around which to organize instruction in literature, in language, in writing (and in speaking)? If so, is Bruner's "spiral" theory the best way to inculcate an awareness of these principles? How can we find out?

3. The whole question of determining some kind of sequence in instruction in language, literature, and composition involves a great many considerations:

   a. Relation of instruction to age and emotional and social maturity of the child

   b. Relation to other aspects of the English curriculum (Is some material antecedent to other material?)

   c. Some of the basic areas involved in arriving at answers to problems of sequence:

      (1) Literary theory (versification, character, setting, structure, etc.)

      (2) Symbolic statements in literature

      (3) Argument and persuasion

(4) Logic

(5) Syntax

(6) Semantics

(7) American dialects

(8) Selection of specific literary works or genres for different levels and types of students.

IV. APPLIED RESEARCH

The seminar members assumed that the profession should move simultaneously from both ends of the research spectrum--"basic" and "applied." The basic research will undoubtedly be a continuing effort with many different approaches and theoretical frameworks erected. Meanwhile, applied research focuses on evaluating the efficacy of what goes on in the English classroom, on testing the effectiveness of one or another technique or approach. Recognizing the danger that, until certain types of basic research are carried out, we may reinforce aims that are ill-conceived, we must still take the chance and try to fix on those outcomes about which there can be some general, if always tentative, agreement.

Within the category of "applied research," the seminar developed a flexible point of view which could do much to reduce the diffidence toward educational research now current among English scholars. The category of basic research, we have seen, would involve scholars in research efforts valuable for the improvement of teaching. The seminar elicited a number of possibilities in applied research which also introduce a considerable degree of flexibility into what has seemed a rather rigidly limited field.

First, projects of widely differing scope can be useful at this time. Generalizability of results need not be the sole criterion of the value of a project. Studies small in scope may nevertheless generate hypotheses worthy of large-scale testing. Fairly limited "pilot studies" may yet clarify the nature of the possible factors at work in a situation and may thus lead to clearer formulation of hypotheses and better organized further research. The same research design might even be carried out in projects ranging from the individual classroom to a large-scale effort. The important thing, of course, is that the significance of the findings not be illegitimately extended beyond the limits of the particular research project.

Second, just as there can be flexibility in size and scope of research, so can there be variety in the type of research technique or research design to be utilized. Many important investigations can utilize descriptive techniques rather than experimental designs. There can be studies, for example, of the way in which different factors within a classroom situation or within a teaching situation group themselves--in other words, the studies can be correlational in character. Even surveys have their use. The research design most often associated with the statistical manipulation of quantitatively measured outcomes includes a pretest and a posttest and seeks to evaluate any changes that may have come about as a result of some clearly defined "treatment." Under appropriately controlled conditions, it was declared, even this research design can be used without necessarily involving quantitative or statistical manipulations. Thus, various paths are open to English specialists seeking to make a contribution toward a more systematic understanding of the teaching process in English classrooms.

Large-Scale Research

One member of the group urged the kind of rigorously controlled, statistically-sophisticated, large-scale experimental design made possible by recently developed statistical techniques for dealing with a number of variables present in an experimental situation. Agricultural and industrial research provide examples of the methods of organization and the agencies for research required for such large-scale operations. Similar stringent research procedures and large-scale experimentation, it was claimed, are needed in education. Only if the field of English is "mature" enough for this kind of experimentation will it be possible to produce answers to problems in sufficiently controlled ways to permit application on a nation-wide scale. Once a hypothesis had been arrived at--e.g., that a certain kind of activity would make a substantial difference in literary comprehension or writing competence--it should be tested out in a large number of schools or colleges. A sound design might be developed comparable to experiments in agriculture or industrial research, in which all the factors are very carefully controlled--the amount of time, the amount of practice, the qualifications of teachers, socio-economic levels, and so on. Such a large design in operation would have to be planned and controlled by experts. The results then would be of the general stature of a scientific law, finding that, for example, a particular method has certain effects quite universally throughout the country.

The various curriculum development centers, it was noted, might provide the basis for a network of research centers in English. Thus the same research design could be carried out on a nation-wide scale. Such designs would involve a procedure for drawing random samples of classrooms. If not the curriculum study centers, then some other means should be found to set up a panel of classrooms and of instructors who would be able to try out all kinds of new methods. Again, the analogy was the organization of consumer panels in industrial research. An analogy from educational research was offered in the Minnesota National Laboratory, which is using panels of classrooms to test various innovations, so far largely in such matters as physical arrangements in the classroom.

Perhaps we should now be able to start to apply such designs to problems in the field of English. Recent ETS work on reliable and valid evaluations of writing was cited as justifying some confidence that we are now ready to attempt large-scale studies in writing ability, using, perhaps, the product of five themes. The idea rife among educators that this kind of study is too difficult to carry out, that too many factors cannot be controlled, may no longer be acceptable. The capacity may be present for at least pump-priming activities of this kind, both in terms of experimental design and in terms of measurement.

Given the attitudes toward "quantitative methods" mentioned earlier, the proposals for this type of research design provoked the widest range of questions and reservations. Nevertheless, the group was interested in having the possibilities for such large-scale projects explored. (Document No. 4, in Chapter V, tentatively outlines such a project.)

Variety of Research Designs

Perhaps in reaction to the somewhat grandiose scale of such suggested nation-wide research projects, the members of the seminar repeatedly elaborated on the potential contribution of research with results of a narrower range of generality. Given some teaching outcomes about which there is a certain, if not necessarily perfect, agreement, a variety of ways of testing hypotheses about producing such outcomes can be devised. There is general agreement, say, that a good piece of writing "hangs together"--to use a rather loose term for the quality of organization that is usually stressed. The question then is this: Are there ways of getting students to produce pieces of writing that "hang together"? This kind of question in applied engineering, so to speak, could be attacked in a variety of ways under a variety of conditions. A wide range of relevant teaching techniques and approaches could be isolated, and a wide range of research situations could be devised for testing their efficacy in producing the feeling for a well-organized or unified piece of writing. Such investigations, pursued on a variety of levels of generality, and with a wide range of types of research method, could cumulatively make a valuable contribution, it was felt.

Many of the questions suggested for investigation implied, it is true, some type of controlled research design. Yet, for a variety of reasons, members of the seminar emphasized the possible contribution of descriptive and correlational studies. The possible value even of surveys was admitted. We have already noted the attitude of English scholars to experimental research. This position was reinforced by at least one of the research specialists, who stated: "I tend to believe that the field of research in the teaching of English is not ready for experimental design approaches." His reasons for this position raised questions which have largely been discussed under the heading of "basic research." The significant point here is that this led him to suggest research largely of a descriptive nature, and to suggest that these would help to provide some of the basic answers.

One member of the group supported the kind of study "in which some intelligent person tries to make use of some things he has observed, as opposed to a formal, designed experiment in which conditions are specified and the measurement is specified. The latter is completely defined beforehand; extraneous elements cannot be introduced after it has begun. The descriptive kind of study can be completely open-ended." Even in the area of the more usual experimental design there was a consensus that different levels of rigor or control should be admitted. The important thing is, of course, to recognize the limitations of the particular design. There is a value, for example, in being able to say that "this thing is better than that thing here and now in our college." Another college might question this, but then try it out and find that the same thing worked there, too, or that it worked there, but with a particular important exception. Thus, over a period of time, there would be generated a body of new knowledge about effective or ineffective teaching techniques, or knowledge of things that may be expected in the normal development of students, types of interests, correlations, and so on. Such "lesser" research would therefore still be worthwhile.

Research with results of a narrower range of generality, it was suggested, would best be carried on concerning matters that are not likely to be much affected by external circumstances--things that are true of "human nature," or adolescent nature, or pre- or post-puberty. Another view was that in the field of English the important need is to establish the effects of the wide variety of different circumstances or factors that might affect the results when particular teaching techniques, materials, or arrangements were utilized. This reinforced even more decidedly the value of what the research experts spoke of as "lesser" research. Moreover, such smaller research projects might still be set up with carefully controlled designs.

The preceding discussion of research projects of varying types of design, with varying scope and varying degrees of control, should not be interpreted as assuming that only the large experimental design would require careful planning and research techniques. If smaller and less highly-controlled projects were envisaged as the means for generating hypotheses, the assumption was that the results would be interpreted so as to identify the factors or variables that required further investigation and further refinement. This implied that anyone engaged in this kind of approach to the teaching of English needed to be aware of the basic requirements for sound research. Moreover, the comment was made repeatedly that in the planning of any extensive studies, the cooperation of research design specialists and of statisticians should be sought. Much is to be gained by bringing in such specialists as early as possible, not in order to tailor the design to their prior requirements, but rather to make sure that the final data or results will be interpretable and will answer the questions the experiment was presumably designed to answer.

No one could be made capable of carrying on sound educational research simply through being given some general ideas about criteria of sound research. Nevertheless, it was felt that the profession as a whole should become much more widely aware of such criteria: the question of the precise formulation of the problem and the limitations of the group to which the results might be applied; the need to "control" the various factors present in the situation, so that "confounding" factors might not be present to obscure the meaning of the results; the need to take into account in this connection such factors as the differences among teachers, the differences in intelligence, maturity, and socio-economic backgrounds of students, the different influences at work outside the classroom, such as the mass media, that might influence the linguistic activities of the student; the importance of spelling out clearly the nature of the activities and procedures being tested so that others might carry out the same experiment under similar conditions or might test the results of altering the conditions in a controlled way; the very important need for scrutinizing the instruments for measuring the results; the need for statistical aid in interpreting the extent to which results might be the result of uncontrollable or chance factors, or possible error.

Any new methods, devices, or materials tend to produce an invigorating or stimulating effect. This needs to be discounted in comparisons with more usual methods of materials. Similarly, even in the testing of the usual procedures, the experimental design itself--patterns of assignment, types of tests--may create a superstructure which produces effects of its own. A pre-test, for example, may actually teach the taker of the test how to do better next time.

Measurement Studies

By their very nature, the types of research we have spoken of as applied research or research in the effectiveness of teaching, necessarily require the measurement of students' achievement in some aspect or aspects of English. Much basic research also turns on this kind of measurement. Yet this field of measurement--the construction of instruments for measuring skills or abilities or achievements in the use of English in writing, speaking, or reading--itself needs much intensive work. Witness the difficulties encountered by the Educational Testing Service in its efforts to work out valid and reliable ways of evaluating English compositions in large numbers for the College Entrance Examination Board. This problem of adequate measurement or evaluation was broached frequently during the seminar. Included among the documents in Chapter V are two which indicate certain ways of meeting some of the difficulties inherent in the problem of evaluation of composition.

Some of the kinds of errors in evaluation that the English experimenter might be warned against were indicated. For example, studies of the research in the field of reading reveal that often the evaluation instruments fail to test for the generality of the finding. That is, the evaluation is based on materials which are so similar to what either the actual or the real materials were in the test, or require operations so similar to what the student has been trained in, that the evaluation materials or the test materials do not test whether the students would be able to transfer this ability or this learning to other situations. In some instances, in the reading experiments, the students probably simply learned how to take the tests successfully rather than how actually to achieve the abilities that the tests evidently were evaluating.

A similar caution concerning the evaluation of the effectiveness of teaching led to the recognition of certain kinds of pragmatic evaluation. In experimental designs set up to test the effectiveness of different kinds of programs or teaching methods, such matters as interest and continuing involvement in the subject should not be neglected, particularly in English. In this field especially, the aim is not simply the acquisition of certain skills and knowledge, but the long-term goal of developing lifetime habits of reading and expression. Tests of such dimensions as interest or persistence of attitudes should be built into the experimental design as often as possible. Thus, in addition to the specific testing of students' ability to read and understand literary materials, the students' desire for more such reading should be evaluated, and studies should be made of whether or not students are stimulated to continue to read on their own after the end of the course of study.

Hence, a survey and critique of measurements in the field of teaching was one of the major proposals made during the seminar. Such a study could make an important contribution to the development of sound research in the teaching of English. There is a great deal of information already available (e. g., Buros' Mental Measurements Yearbook), but there is nothing available especially for the use of the English teacher. No book or monograph or publication, such as exists in many other fields, treats measurements in the field of English. There is not even for English a book like Robert Lado's on Language Testing for the foreign language teacher (Longmans Green, 1961). Although even this book does not survey available measurements, it does set forth the criteria for measuring devices and tells the teacher how to develop them. In the field of English, we need a study of the instruments available, and of the ways in which they need to be changed or modified, as well as the development of standards for evaluating and selecting the instruments. Document No. 11, in Chapter V, outlines a plan for carrying out such a survey and critique of measurements in the field of English teaching.

Another suggestion was that a "kit" of tools in the form of measuring instruments is needed for use in making comparative studies of students with different training, curriculum, cultural backgrounds, and the like. Such a kit of measuring instruments might be an outgrowth of a broader study such as has been envisaged, or it might be an interim venture, more limited in scope, but providing some important and basic instruments and guidelines for the teacher of English both in the classroom and in the experimental research situation.

Related to the preceding was the suggestion that it would be valuable to have the body of instruments such as paper and pencil personality tests surveyed from the point of view of the English teacher. The Rorschach test and the tests like the TAT require expert administration and interpretation. There should be indicated the existence of instruments that might provide some evidence concerning personality that people trained in the field of English would be equipped to handle. This type of instrument is relevant to various suggested investigations of the relationship between personalities of teacher and student, or of different personal reactions to literature.

Still another type of suggested methodological research would be geared to developing instruments needed for carrying out sound experimental design. Discussion of the necessity for keeping the stimulus constant or parallel in such matters as the assignment of themes led, for example, to a proposal that a study might attempt to calibrate a series of theme topics. The purpose would be to find a group of topics sufficiently equivalent for a particular grade or situation, so that they could be used in research.

Some Problems in Applied Research

Numerous problems in applied research were mentioned during the seminar sessions. There was no attempt to reach a consensus concerning priorities. Some problems for research were cited as particularly worthy of attention from the profession, but others were singled out as illustrations of some point of methodology or approach. Many of the problems listed in the preceding chapter imply related applied research. The majority of the proposals developed in the following chapter also fall into this category. Hence the following list is offered merely as a sampling.

1. Experimentation to test the value of Fries' suggestions in Linguistics and Reading for rationalizing the teaching of spelling.

2. Investigate the long-run effect of early instruction in reading such as is now being carried on in some nursery schools and kindergartens.

3. Study the merits of large and small group instruction, and of the various combinations of these, in the teaching of literature.

4. Investigate the value of independent study of literature compared to classroom study.

5. A study of a large representative sample of the kinds of questions teachers ask about literary works in the classroom. This would make possible a comparison with the stated aims of literature teaching in the various curricula.

6. A study of the effects of different classes of questions about literature on the students' competence and interest in dealing with literary works. What is the effect, helpful or retarding, of such questions on students of different ages, abilities, and backgrounds?

7. Studies at different curricular levels of the effect on habits of response to literature and on competence in reading of different types of approach: e. g., emphasis on technical analysis and terminology, emphasis on relation to student's own experience, emphasis on human problems, etc.

8. A study of the major differences between students who read more than 50 self-chosen books a year and students who read less than 10. What circumstances, abilities, or other factors favor wide or restricted reading?

9. Study the impact of a particular work of literature not only on students of different ages, but also on students from various backgrounds: e. g., rural and urban, or perhaps culturally rich and culturally deprived.

10. The development of a test to determine the student's ability to identify the audience being addressed in selected prose passages, the reasons why he is able to specify the audience, the effect on the whole passage of the author's addressing a specific audience.

11. A study of the effect of introducing literary analysis and critical theory at various levels of the curriculum, elementary and secondary.

12. At what point on the verbal intelligence scale must we give up hope of developing the concept of form?

13. A study of the effect of direct teaching of elementary logic on effectiveness in written composition, especially in relationship to levels of intelligence, in high school and college.

14. How much criticized practice in writing do students need at different grade levels and at different levels of intelligence in order to make optimum progress in writing?

15. A study of the effect of eliminating required English in the freshman college year, and compensating for this by a pattern of required writing, speaking, and discussion in other areas of the curriculum.

16. A study of the effect of teachers' comments on the writing habits of students of different ages, abilities, and backgrounds. What are the chief classes of comments and

17. Develop exercises that lead pupils to grasp the process of arriving at an organizing principle for disparate materials, in order to discover whether such insights are translated into the writing of more unified compositions.

18. Investigation of the effect of different ways of assigning compositions on specific characteristics of the students' writing.

19. Studies of the effect on students' writing of teaching arrangements that emphasize the concept of writing for an audience. E. g., papers to be read by the student's classmates, or all assignments to indicate the specific reading public to which the composition is to be addressed.

20. A study of the relation to semantic or other aspects of student writing of emphasis on elimination of certain verbal traits, e. g., whether repression of use of intensives would affect looseness of organization, or whether direct training in organization would affect frequency of intensives.

21. Studies of the relationship between the teaching of grammar and improvement in writing, e. g., the direct teaching of grammar as an aid to writing, the teaching of grammar as a humanistic subject without direct connection with writing, and the teaching of writing without any teaching of grammar.

22. A study of the effectiveness of different types of teaching approaches to grammar, e. g., inductive and deductive, for pupils of different levels of mental ability.

24. What aspects of the English program require teacher presentation or supervision? What aspects of writing, literature, or grammar can be effectively programmed for students to carry on individually? What aspects are best acquired through relatively unstructured independent study by motivated students? (Investigations of these questions would involve definition of the type of learning experience relative to each of the several objectives or competencies which students are expected to attain. Then a number of hypotheses could be developed as to alternative ways of providing these learning experiences.)

23. A hypothesis to be tested: Individual teachers have differential competencies in the kind of learning experiences which they can provide, i. e., they may be more successful with one type of teaching technique than another. If it is established that individual teachers do produce better results with particular patterns of instruction, teams of such teachers might then be assigned to one or more groups of students whose achievements would be measured against comparable groups taught by single teachers utilizing the whole gamut of techniques.

25. A study of the effect of the factor of "teacher personality" for the purpose of testing the hypothesis that things such as enthusiasm, rapport with the class, etc., may outweigh such factors as teaching methods or the teacher's command of the material. Make the study at different curricular levels and in relation to the teaching of different aspects of the English programs.

26. Experiments might be carried on to discover whether students have particular affinities for particular types of instruction or technique. This might involve the assignment of students to various types of instruction or learning experiences based upon measured personal characteristics. Or on an exploratory basis, students might be assigned to various types of instruction on a random basis, using measures which could be analyzed in relation to student achievement to determine the extent of interaction between personality characteristics and achievement induced by certain patterns of experience.

27. A series of experiments designed to determine possible individual differences with respect to the effectiveness of various teaching methods or "educational treatments." For example, students who tend to be compulsive might respond differently from non-compulsive students to particular approaches to composition, or to grammar.

V. SOME TENTATIVE PROJECTS

After three sessions devoted to the exploratory discussions reported thus far, the seminar divided into small groups, to work on designs for hypothetical research projects in the teaching of English. (The term "hypothetical" is used here to indicate that the purpose was not to plan projects with particular personnel or sources of financial support in mind.) As the seminar worked out, only the early phases of such planning could be carried on. All of the members of the seminar had received copies of the Steinberg report, but the planning period for the seminar was too short to permit prior preparation of materials. Hence, within the brief period of two or three sessions, about a day's consultation, each group had to select a question, come to some common understanding of its precise meaning, and work out a proposed research approach to it.

These working groups demonstrated that in any such undertaking ample time should be provided for the process of consultation between English specialists and research specialists. Terms which are very much taken for granted by the expert in his own field had to be defined for the person in the other discipline. It was important to spell out operationally exactly what goes on in the English classroom in the teaching of many skills and knowledges which the research expert knows only in the finished product. This was an important stage in the effort to think through a relevant technique for testing the soundness of the teaching method. Equally necessary was the spelling-out of the particular outcomes aimed at through the teaching techniques or activities described.

The way in which the working groups were constituted should also be explained. Using a basic list of major questions derived from the Steinberg report, to which other questions might be added if the members desired, each person was asked to indicate his interests in terms of first, second, and third choice. A quick survey of the preferences made it possible to assign a research person and one or more English specialists to five groups, some of them designated only by so general a label as "composition" or "grammar." After each working session, the total seminar group met briefly to report on progress. At the beginning of the third session, several groups felt that they had progressed as far as they could without going into much greater detail and devoting a much longer time than remained for the seminar program. They therefore submitted their documents, and entered into some other working groups or constituted a new one for the exploration of some problem.

The seminar met as a whole on the last day, and surveyed the various documents produced, with mingled satisfaction and dissatisfaction. On the one hand, much had been accomplished in an extremely short period of time. On the other hand, it was not possible in the last session of the seminar to subject these documents to general scrutiny and revision, so that they could be approved in any formal way by the whole seminar group. Nor could the members of the group, all busy people, undertake to do this after the seminar had ended. It was agreed that although omissions would probably be noticed or needed controls and strengthening of the designs be discovered, no such efforts to tinker at the documents should be attempted. Instead, the tentative and hypothetical nature of these exercises in research design should be allowed to remain obvious.

The expectation was not that any one of these projects would be taken as it is set down here and carried out by anybody as a research project. The primary purpose of these documents, as one member of the group phrased it, "should be to inform people about the kinds of projects that this sort of group would think of more or less off the cuff during a short conference as worthy things. Almost any one of these projects would have to go through the usual mill, about three months or so further exploration of adjustments, compromises, extensions, and so on." Someone really committed to the solving of the problem probably would involve others with him, and would devote a good many months to working out plans. He would probably carry on some exploratory activities in order to work out the details before launching into the major research project.

A number of the projects outlined incorporate a formal experimental design of the popular "pre-test; treatment; post-test" type. As suggested in Document No. 3, this kind of design requires an analysis in which the post-test scores for different treatments are compared after eliminating the differences in the pre-test scores by the use of analysis of covariance. Designs with pre-test covariates are frequently used in educational research as a substitute for random assignment of the experimental units to treatments. Administrative criteria sometimes dictate the assignment of the experimental treatments, and the experimenter has no other alternative.

One member of the seminar suggested that "the use of a pre-test is not always an adequate substitute for random assignment of classrooms to treatments. Even with random assignment the pre-test may not increase the precision of the experiment sufficiently to justify the additional work in preparing a parallel form and including another test in the class schedule. An effort to structure the experiment so that each teacher served as a block would produce a more precise test of the teaching methods in question." This principle of "blocking by teacher" is used, for example, in Documents No. 4 and No. 9.

The preponderance of formal experimental designs in the documents aroused some concern that this might be misinterpreted as implying a preference for this type of research. As has already been indicated, various members of the seminar held that the experimental type of research was not necessarily always the most desirable one for dealing with problems in the field of English teaching. Proposals for descriptive and correlational studies have been reported (e. g., proposals No. 4, on page 14, and No. 4, on page 16, listed under "Basic Research"). Measurement studies, and an approach to the problem of recurrent basic concepts, are also represented in the appended documents, listed on the following page.

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No. 1

A NEW ATTACK ON THE EFFECTIVENESS OF THE TEACHING OF GRAMMAR IN THE IMPROVEMENT OF WRITING*

Introduction: It seems evident from a study of the reviews of literature on the subject that truly critical and informative experiments on the effectiveness of grammatical learnings in the improvement of writing have not yet been performed. This is traceable to several facts: (1) there has not been a sufficient appreciation, on the part of would-be researchers, of the several different kinds of grammatical teaching; (2) research has not been focused on the needs of those students whose writing shows deficiencies in the area of grammar; (3) the experiments have not been well designed, being too brief in duration, poorly controlled, or conducted with inadequate measuring instruments and procedures. Let us spell out each of these points.

1. Kinds of grammatical teaching. "The teaching of grammar" has meant many things to many people. All too often, it seems to have meant a dreary recital of grammatical rules and pseudo-logical concepts, with the result that at best the student can only identify parts of speech and perform the operation of "parsing" or diagramming a sentence, with no real understanding of grammatical structure or of the function of the elements parsed or diagrammed. Another kind of "grammar" concerns the teaching of standard usages as against sub-standard usages; while such teaching may indeed be useful and even necessary, it does not have any immediate bearing on the problems writers have in constructing or revising sentences. Still another kind of grammar teaching is the technical exposition of morphology--e. g., the listing of the modifications undergone by certain parts of speech with changes in number, tense, mood, degrees of comparison, etc. But again, such teaching does not bear immediately on students' problems in writing, particularly when they already have the morphology of English built into their normal habits of speech.

We believe it is possible to specify a kind of grammatical teaching which will be both (a) consistent with contemporary linguistic theories of grammar and (b) relevant to students' problems in composition. In many ways, such teaching would build upon traditional grammar, but it would add certain concepts and ideas from current theoretical discussions. It would start with a consideration of the principal

*Committee: John B. Carroll, W. Nelson Francis types of constructions at the sentence, clause, and phrase levels. The student would be taught to identify these constructions in sentences of increasing complexity, and recognize the components of these constructions in such terms as "nominal construction," "modifier construction," "verb phrase," etc. He would then be introduced to various types of grammatical transformations from independent to dependent clauses, or the transformations that produce noun-compounds or nominal phrases. Exercises would be given in the recognition and manipulation of such transformations. Further, an effort would be made to give the student considerable facility in recognizing ways in which sentences can be rearranged in order to produce balanced, easily construed structure. (Several contemporary textbooks attempt to do these things, e. g., Paul Roberts' English Sentences.) But further development of teaching techniques is needed and should be done in the light of an analysis of students' behavior in composing and revising sentences. Teaching techniques should hew close to the expression of concrete reality and to the sentences found in realistic situations rather than to the abstract and unlikely sentences found in some composition books. The teacher should work inductively as much as possible; that is, sentences and grammatical structures used should be produced by the students themselves from their own operational knowledge of English and in their own normal dialect and vocabulary. The students themselves should be led to feel that they are extending their already considerable linguistic proficiency rather than learning a wholly new and unfamiliar set of linguistic habits.

2. Relevance to students' composition problems. Previous research seems to have been conducted under the assumption that grammatical teaching (of whatever variety) will have demonstrable effects for all students; in actuality, it is probable that such teaching is needed by some students more than others, and that some students will profit more than others. Research design should allow for these possibilities. It should utilize carefully developed procedures for identifying student composition difficulties and for demonstrating the effects of teaching procedures upon these kinds of difficulties. Research designs should avoid the global, undifferentiated evaluation procedures utilized in early studies in this area. Rather, use should be made of the kinds of tests and theme-grading procedures being developed or further refined according to the research plans set forth elsewhere in this document.

3. Experimental design. With few exceptions, previous studies of the relevance of grammar teaching to composition ability have been small-scale, poorly designed efforts carried on over too brief a period

of time to allow one to expect any startling effects to be demonstrated. A crucial experiment would require the use of a large number of classes, a substantial number of specially trained teachers, and the use of an appropriate statistical design for controlling sources of error as well as possible.

Aspects of the design.

1. Basically, this experiment would be run as a before-after design with experimental groups and control groups. Pre-tests post-tests of grammatical ability and of composition ability would be utilized.

2. The experiment would be run at three levels; e. g., 8th grade; 11th grade; and the college freshman year.

3. The experiment itself would require one year; e. g., there would be a year between the pre-test and the post-test measurements.

4. Experimental and control groups would be stratified with respect to grammatical ability and also (orthogonally) with respect to composition ability. The several groups thus constituted would in some cases be taught together, and in others, taught separately, in order to investigate the effects of homogeneous vs. heterogeneous grouping.

5. Control groups would be taught "ad libitum" in accordance with techniques customarily employed at the several grade levels, but careful descriptions of these techniques would be gathered and analyzed. It is possible that grammatical teaching would be omitted altogether in some control groups.

No. 2

GRAMMATICAL KNOWLEDGE AND WRITING ABILITY*

An experiment or series of experiments to investigate the correlations among the following:

1. Grammatical perceptiveness and manipulative skill, distinct from specific knowledge of theoretical, analytical, or taxonomic grammar.

2. Repertory and relative frequency of grammatical structures used in ordinary themes, written without special attention to or concentration on grammar.

3. Independent evaluations of the papers analyzed, considered with regard to (a) their effectiveness as writing, and (b) their grammatical accuracy and sophistication.

4. Knowledge of a theoretical system of grammatical analysis.

Such an experiment should be conducted on several levels: e. g. 7th, 9th, 11th, and college freshman grades. In each case the group studied would not need to be large, but should be selected so as to be relatively homogeneous in certain obvious qualities such as I. Q. and general socio-economic-educational home background.

The items listed might be tested in somewhat the following ways:

1. Primarily by a kind of performance test. One type of activity might be following analogical patterns in creating grammatical structures to match those supplied on the test. For example, the student might be given the following sets of data, with the instruction: "Assuming that D is to C as B is to A, write D."

    A. The farmer killed the duckling.
    B. The duckling was killed by the farmer.
    C. The postman delivered the letter.
    D.

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Clarence Hach

A. I saw a red-haired woman. She was driving a taxi.
B. I saw a red-haired woman driving a taxi.
C. We encountered Mr. Jones. He was walking down Main Street.
D.

A. I have deliberated at length. I consider the proposal impractical.
B. After lengthy deliberation, I consider the proposal impractical.
C. He prepared with care. He performed the experiment.
D.

These are primarily exercises in analogical transformation. They ask for no specific knowledge of grammatical terminology or analysis, but instead for a recognition of equivalent grammatical structures and processes. They may range from very simple ones to quite complicated ones.

Tests such as the Carroll "Words in Sentences Test" might also be used.

2. By detailed analysis of a sampling of themes, in which all the grammatical structures used are identified and counted and the number of each kind tabulated. The method of grammatical analysis used should be the most sophisticated available to the analyst. In the present state of grammatical knowledge and theory, this probably means a combined transformational and IC-based phrase-structure syntax. It should be done on several levels: 1. types of sentences according to the kinds and numbers of transformations used; 2. kinds of predication (transitive, intransitive, copulative); 3. kinds of modification; 4. kinds of verb phrases; etc.,

3. a) By a single evaluation (on a scale of 5, 7, or 10) of each paper by several independent judges, all competent readers, who are asked to judge the paper simply on its overall effectiveness as a piece of writing.

b) By a similar evaluation judging each paper for the degree to which its sentences exemplify good grammatical construction.

4. By a rather searching test based on the kind of grammar the students have been taught. If the experiment is large enough in scale, a further dimension of correlation might be secured by using one group that has been taught the traditional grammar and others that have been taught structural and generative grammar respectively. For the first of these there are presumably standardized tests already in existence; for the others comparable tests would probably have to be developed.

Such a study should begin to answer some at least of the following questions:

1. Is good writing characterized by an objectively determinable repertory of grammatical structures occurring within a statistically significant range of frequency?

2. Is there a correlation between the ability to perceive and learn to use grammatical structures and a knowledge of theoretical grammar?

3. Is there a correlation between the ability to write well and either of the factors mentioned under 2?

4. What contrasts, if any, are there between the various grade levels with regard to (a) ability to perceive and learn to use grammatical structures; (b) grammatical practice (number and frequency of structural types used); (c) theoretical grammatical knowledge?

No. 3

AN EXPLORATORY STUDY OF THE EFFECTS OF VARIOUS TYPES OF "PRE-WRITING TEACHING" TECHNIQUES ON WRITING SUCCESS OF JUNIOR HIGH AND HIGH SCHOOL STUDENTS*

Introduction. Before students set to work writing a composition, various techniques are used to guide the students' thinking, to give them suggestions, and in other ways to help them get started. For example, some teachers hold group discussions, in which the subject matter of a prospective composition is considered from various angles; other teachers ask students to outline their compositions and submit them for comment before they start writing; still other teachers have students speak their compositions on an impromptu basis before they start writing them. Still other teachers merely give lectures on how a given composition task should be approached. Let us call all these procedures "pre-writing teaching techniques," recognizing that teachers vary widely in their use of such techniques. In planning the present study, we believe that little of a definite character can be said about the effect of these prewriting techniques. We do not know whether they have any effect at all (beneficial or deleterious), nor do we know whether they are equally effective for different types of students, for different types of compositions, or for different grade levels. Furthermore, we do not know whether it is eventually possible to "wean" students from this type of instruction, that is, whether it teaches the student to do for himself some kind of useful "pre-thinking" of composition performance that will improve his writing.

It is quite possible that English departments could do pilot studies of these problems. Larger studies in which more rigorous controls would be observed would have to be conducted under the supervision of university or institutional research organizations, and would require cooperation among English departments in a variety of schools or colleges.

The results of such studies would be useful in training people to teach English composition and in writing manuals on writing.

Basic design. Assume we have a given "prewriting teaching technique" (PWTT), and a series of equivalent theme topics of a given sort (either Descriptive, Expository (explanatory), Narrative, or Persuasive).

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Then a possible design for detecting the effect of this technique on a single occasion would be as follows:

	Pre-test	Treatment	Post-test
Group E1	Topic A Theme	PWTT on Topic A	Topic A Theme (retest)
Group E2	Topic A Theme	PWTT on Topic B	Topic B Theme
Group E3	Topic B Theme	PWTT on Topic A	Topic B Theme (retest)
Group E4	Topic B Theme	PWTT on Topic B	Topic A Theme
Group C1	Topic A	(none)	Topic A (retest)
Group C2	Topic A	(none)	Topic B
Group C3	Topic B	(none)	Topic B (retest)
Group C4	Topic B	(none)	Topic A

It would be assumed that the several groups would either be suitably equated or chosen randomly. For example, a class of 32 students could be divided into 8 groups of 4 each on a random basis, and such a design could be replicated over a series of classes. All themes written (both pre-test and post-test) would be graded on the series of dimensions established by ETS; each theme would be graded by at least 3 readers.

Statistical analysis would compare the average post-test theme ratings of the several groups, using pre-test theme ratings as a co-variate (control variable). For example, comparisons of groups E1 - C1, E2 - C2, E3 - C3, and E4 - C4 would yield information on the effect of the PWTT both on a fresh theme topic and on a retest of the same theme topic.

No. 4

A PROPOSED TWO-YEAR STUDY OF THE RELATIVE EFFECTIVENESS OF A RHETORICAL AS OPPOSED TO A LITERARY EMPHASIS IN FRESHMAN COMPOSITION COURSES*

PURPOSE: To test the effect on student performance in expository writing of:

> (a) using modern expository prose chosen for its relevance to specific problems in composition, focusing on principles of rhetoric and their application,
>
> vs.
>
> (b) using standard English and American imaginative literature, chosen solely for literary merit, focusing on the understanding and appreciation of literary values.

Statement of Background Although most freshman English courses in American colleges and universities agree in attempting to teach students to write expository (and usually critical) prose, there is vast uncertainty over the particular kind of content that can best advance students towards this goal. One of the sharpest disagreements concerns whether, in a course that tries to teach expository writing, students should be asked to read and analyze and write about standard works of English and American imaginative literature; or whether they ought instead to study and write about essays and similar factual writing, as the sort of composition most like the kind that they are trying to master. In a course based on imaginative literature, it is customary to spend little or no classtime identifying and discussing specific problems and principles of expository writing, the assumption usually being that the principles will be acquired intuitively from study of the literature and that the problems are best dealt with individually as they arise in a student's own compositions. In a course based on essay literature, there is usually a fairly systematic attempt to deduce the principles of expository writing from the essays, to spend a considerable amount of classtime focusing these principles on the students own writing, and to expect the student to apply the principles consciously in his compositions.

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Advocates of both kinds of course are vehement in defense of their own practice, but so far neither has been able to prove that students do or do not write better as a result of taking one or the other kind of course.

The problem is significant for a number of reasons: 1.) A fairly clearcut answer to such a question about content would help to put freshman composition instruction on a sounder, more rational basis than it now enjoys. 2.) Any measure that improves the teaching in this course takes on importance from the sheer number of teachers and students affected, since freshman composition is the single common denominator of the freshman curriculum. 3.) The average ability of freshman students and the quality of their preparation in English has recently been increasing in most four-year colleges and universities. As this trend has become apparent, college English departments have seemed increasingly inclined to equate habits of correct usage with competence in writing and to substitute courses in literature, with a certain amount of related writing, for more systematic attempts to teach composition directly. Since it appears likely that this trend will accelerate (partly because most four-year colleges and universities must become more selective in their admission policies) the assumption underlying such a change in the content and focus of this course needs to be tested as soon as possible.

This is, of course, by no means the only problem of freshman English that needs to be studied. But it is as good a place as any to begin.

This project offers a procedure or design by which future examinations of content and approach in composition courses may be conducted. In fact, setting such a procedure under way, or at least one obvious variable in the teaching of writing, may be the most important value of the project. It is essential that the method of attack here, as refined and revised, be made available for future studies of more sophisticated questions in the teaching of composition. If forty university staffs can be prevailed upon to cooperate in one such experiment, then the foundation is laid for others.

Here, for instance, are some further pairings of possible courses that could be set up in a similar way to answer some crucial questions in a field where ignorance now reigns and chaos prevails:

1. a course stressing work in semantics vs. a course with no semantic materials;

2. a course stressing formal logic vs. a course or courses otherwise oriented;

3. a course in which much is made of distinctions between language and reality, between word and thing, vs. a course in which no such distinctions are made;

4. a course in which no reading materials are used, in which the only writing discussed is the students' own, vs. a course or courses employing readings;

5. a course based on materials from traditional and modern rhetoric, including readings in rhetorical theory vs. a course assigning no such materials.

In all such future projects, as in this, it is essential that the investigator "block by teacher"--that is, that the same teacher use both alternative methods, either in the same year or (more probably) in immediately following years. What should emerge from a series of studies such as this ought to provide a genuine breakthrough in the profession, by beginning to answer these key questions:

What kinds of materials and approaches work best to produce acceptable expository writers? More specifically, when information on characteristics of individual students and instructors has been provided, what kinds of courses work best for particular kinds of students? What kinds of courses can be taught best by particular kinds of teachers?

Source of experimental subjects. Students of two instructors of freshman composition from each school in a planned sample of 40 colleges and universities will serve as subjects for this experiment. Each instructor will teach two sections of approximately twenty-five students. Thus approximately 4, 000 students will be involved. Because of the type of experimental design proposed for this study, it will be necessary to assume no radical change of entrance requirements in the participating schools during the period of study.

Experimental Design. The study will take the form of a "methods-by-instructors" analysis of variance design, i. e., each instructor will teach both methods in succeeding years. There will be "nesting" of schools within order of presentation, of instructors within schools, and of sections within instructors. Specific descriptions of institutional methods, assignment of schools to order of presentation, selection and briefing of instructors, and assignment of students to sections are as follows:

Instructional methods

A. Rhetoric-Oriented Course

1. Reading will consist of expository prose of good literary quality, written since 1900 by English and American authors. This restriction by time is intended to make sure that the student will study examples of good writing that resemble as closely as possible the kind of writing he is being taught to master. Typical selections might include work by Wells, Chesterton, Forster, Orwell, Krutch, White, Edmund Wilson, etc. Approximately half of the classtime in the course will be spent analyzing and discussing these selections.

2. A single semester course of fifteen weeks is assumed, during which students will write twelve papers ranging between 500 and 700 words each.

3. It is assumed that a standard handbook of grammar, rhetoric and usage will be required. Students will use it mainly for reference, though some of the sections on rhetoric will be assigned as a supplement to other instruction.

B. Literature-oriented Course

1. Reading will consist of standard works of English and American imaginative literature written before 1900, chosen for their excellence as literature and their suitability to students of this age. The restriction by time is intended only to insure that the works have unquestioned status as classics. A genre approach is recommended: several plays including at least one by Shakespeare; novels (e. g., *Pride and Prejudice*, *Vanity Fair*, *Moby Dick*); selections from major poets; possibly some short fiction.

2. Same as for other course.

3. A similar handbook will be required, but it will be used entirely for reference.

Assignments for Writing

Course A	Course B
Papers on non-literary subjects: description, argument, personal experience, with some analysis of	Papers on literary subjects; exercises in close reading, in comprehension of literary

Course A	Course B
expository prose. Suggested final assignment: a paper reviewing and assessing the student's own experience as a *writer* in this course.	organization and style. Suggested final assignment: a paper reviewing and assessing the student's own experience as a *reader* in this course.
Approximately half of the time will be devoted to discussions of the current essay assigned, its structure and style. No emphasis on literary history and none on the author's biography. A close scrutiny of at least several passages in detail, stressing the way in which a speaker and a tone are created by choices of language. The remaining time will be devoted to demonstration of rhetorical principles and their application in a systematic fashion, *and* to class discussion, analysis, and criticism of student writing. The practice of distributing duplicated samples of student responses to theme assignments is an essential part of this activity.	All classtime devoted to discussion of the current literary text, its structure and style. Little emphasis on literary history, none on the author's biography. A close scrutiny of at least several passages in detail, stressing the way in which a speaker and a tone are created by choices of language.

Counter-Balancing Order of Presentation of Instructional Methods.

Twenty of the participating schools, randomly selected, will offer method A in the first semester of the first year of the study and will offer method B in the first semester of the second year. The remaining twenty schools will proceed in the same fashion, but with method B offered first.

Selecting and Briefing of Instructors. Within each school, two instructors will be assigned at random to the study from among those with at least one year of teaching experience and at least two years of tenure in prospect. (The instructors must not be permitted to select themselves.) Both instructors will teach method A the first year and B the second, or vice versa, depending on the order of presentation in their particular school.

Instructors participating in this study will be briefed on each year's method of presentation during freshman orientation week.

Selecting of Students. A random sample of approximately 100 entering freshman students will be selected in each year of the study and assigned at random to the four experimental sections. Students qualifying for either remedial English or honors English, where such courses are offered, will not be included in the sample of 100.

Variables -- Achievement. Internal Test: A problem in expository composition at the end of the semester, requiring the student to discuss an issue not directly treated in either of the two experimental courses. Probably issues on education, with implications for the student's own particular experience, should be sought out. Example: a contrast, based on a given prose passage, between intellectual expectations in school and college. Another example: a passage on how learning takes place, with the invitation to relate general statements to the student's specific experience of learning something.

External test: Students in these sections will be required to take a second test, at the end of the semester following the composition course, in which a further check of effectiveness can be attempted. Ideally, this second test should take place without student awareness that "English" is being examined--that is, a piece of writing for some other required course that all students take would be desirable. However, under conditions prevailing at most colleges, it would probably be necessary to reassemble the students for the second test. In any case the scope and purpose of the experiment should not be publicized to students.

Ancillary Variables

For Students:

1. Sex
2. Verbal SAT scores, or equivalent predictive data
3. Standing in high school class by deciles
4. Number of years of H. S. English and average grade

For Instructors:

1. Sex
2. Years of teaching experience
3. Degrees
4. Detailed information on English preparation

Reading, Scoring and Scaling of Test Papers. All papers will be read by judges especially retained for this purpose. Reading will begin as soon as papers are available at the end of the first semester of the first year. Details of the method of scoring will be the responsibility of the test construction specialist associated with the study.

Scaling of the scoring categories for purposes of multivariate normal analysis will be the responsibility of the statistical specialist associated with the study.

Formal Analysis. The formal tests of hypothesis and estimation of effects for the data obtained in this study will be performed by multivariate analysis of variance. The partition of sums of squares and products will take the form of Table 1.

Table 1

Assignment of degrees of freedom
(Number of methods: t=1; number of orders: m=1; number of schools: n=40; number of instructors per school: s=2; number of sections per instructor: r=2)

	Source of Variation	Degrees of Freedom
Fixed		
t	method	(t-1) = 1
m	order of presentation of methods	(m-1) = 1
	method x order interaction	(t-1)(m-1) = 1
Random		
n	schools within orders	(n-m) = 38
sn	instructors within schools and orders	(s-1)n = 40
	school x method interaction within order	(t-1)(n-m) = 38
	method x instructor interaction within schools and orders	(t-n)(s-1)n = 40
	Replication (between sectors within methods and instructors)	(r-1)tsn = 160
Total (corrected)		319

Informal Analysis. If significant school x method or instructor x method interactions are demonstrated in the formal analysis, the ancillary variables will be employed in a correlational analysis to aid in explaining these effects.

Sequence of Steps in the Study

1. Formulation and pretesting of instructional methods
2. Development and pretesting of internal and external tests
3. Development of test reading and scoring procedures
4. Selection of schools
5. Selection of instructors
6. Selection of students
7. Retaining of readers
8. Execution of study
9. Reading and scoring of papers
10. Transcription of data
11. Analysis and interpretation

Suggested Composition of Research Team

1. Project director: specialist in English composition
2. Technical specialists in a) rhetoric, b) literature, c) essay-test construction, d) experimental design and analysis (statistics).

No. 5

RESEARCH PROBLEMS IN THE RELATIONSHIP OF SPOKEN AND WRITTEN LANGUAGE *

1. A comparison of samples of spoken and written English from a small group of college freshmen, with regard to

   a) Choice of vocabulary

   b) Syntax

   c) Degree and types of redundancy

   d) Amount and kinds of inter-sentence connections

   e) Methods of idea development

Parallel studies of different groups--adults, children at various educational levels, and from varying socio-economic levels--would be desirable for comparative purposes, especially if the intent is to attempt some general conclusions about the differences between written and spoken styles. Larger samples and especially a series of such studies might lead to correlations with personality types, socio-economic background, educational level and experience, regional speech varieties, and other variables.

The pattern for the study would require.

1. A series of tape recordings of the student's oral response to several situations: a) a question put directly by an interrogator; b) the same question put to two or three for discussion

2. A series of samples of the student's writing, preferably on the same subjects as the oral material.

It is important that the transcriptions of the oral material be complete--including repetitions, hesitations, hesitation fillers, and pauses--and unprejudiced by punctuation. Prosodic features should be supplied by a competent linguist.

*Committee: Paul B. Diederich, W. Nelson Francis, Harold Martin

It is possible and perhaps desirable that material elicited for some other purpose--counseling interviews, for example--could be used.

2. Various projects in applied research would almost certainly develop out of the knowledge derived from the descriptive study outlined above. The group has some ideas about what these might be, but has not had time to develop specific projects related to them.

No. 6

A STUDY OF THE EFFECT OF ORAL READING OF LITERARY WORKS ON THE DEVELOPMENT OF VARIOUS SKILLS AND ATTITUDES IN ELEMENTARY PUPILS WHEN THEY ARE FIRST BEGINNING TO READ*

Background. The wide dissatisfaction with graded readers has been of two kinds: (a) artificiality of sentence-pattern, and (b) lack of intrinsic interest and literary merit. An extensive study under the direction of Ruth Strickland is directed to the first. This study is directed to the second. The hypothesis is that oral reading by the teacher of works too difficult for the pupils to read but still intrinsically interesting to them might do more than conventional instruction to develop reading speed, reading comprehension, reading range, volume of voluntary reading, sensitivity to literary values, and the like.

Procedure. First, second and third grades in paired schools or paired groups of schools would be used for the study. In one of the pair, reading would be taught solely through the use of established techniques and graded readers. In the other, these techniques and readers would be supplemented by two (?) daily twenty-minute (?) periods of oral reading by the teacher of such literary works as Alice in Wonderland, Wind in the Willows, etc., etc.

The pattern could be made more varied and perhaps more revealing if, instead of two kinds of situation, the number were raised to three or four, as follows:

(a) graded readers and developmental reading techniques only

(b) the same supplemented by teachers' oral reading

(c) the same supplemented by tapes or recordings of literary selections

(d) b. or c. with texts supplied to the students for them to follow as they hear the selection read aloud.

In every school pupils would keep a day-by-day or week-by-week account of the amount of their voluntary reading.

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Evaluation. At the end of each year, several determinations might be made: (a) of progress in reading skills as measured by conventional tests; (b) of development of literary sensitivity as measured by conventional tests; (c) of amount of voluntary reading, by examination of pupils' records.

Remarks. No effort need be made to limit the ancillary activities of teachers who read aloud, defining words on demand, explaining in response to questions, allowing or encouraging the pupils to talk about what has been read.

No. 7

AN EXPERIMENT TO DETERMINE THE EFFECT OF ORAL PRESENTATION UPON IMPROVEMENT IN WRITTEN COMPOSITION*

If we hypothesize that reading aloud helps young children to learn to read and to enjoy literature, may we not hypothesize that having the student read aloud and discuss the rhetorical effectiveness of his writing will improve the written composition of more mature students?

An experiment might be devised in which random fourths of each of a number of classes taught by different instructors would be divided as follows:

Group 1. Each student would read his writing aloud to a classmate, discuss it with the classmate, revise and submit it to the instructor.

Group 2. Each student would read his writing aloud to his teacher (tutor, lay reader), discuss it with the teacher, revise and submit.

Group 3. Each student would read his writing into a tape recorder, play it back several times, revising as he listens, and submit it to the instructor.

Group 4. These students would do none of the above, but each would turn his theme in to the instructor at the same time as the other students.

Pre-tests would be given to determine the correctness and quality of each student's writing at the beginning of the treatment. The treatment would continue over several themes, perhaps during a whole semester. During the semester, before each theme was marked, a copy would be made and preserved for terminal evaluation. After the copies were made, the themes would be marked and returned in the usual way.

At the end of the period of treatment, all of the themes would be evaluated by independent readers to see whether any one of the four groups had made markedly more or less progress than any of the others.

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No. 8

A STUDY TO DETERMINE THE EFFECTS OF WIDE VS. LIMITED INDEPENDENT READING UPON A VARIETY OF COGNITIVE PROCESSES AND ABILITIES*

Groups of students who read 40 or more books per year would be compared with students who read 10 books or less. A kit of pure factor tests of various cognitive abilities (verbal ability, inductive reasoning, deductive reasoning, perceptual speed) would be administered before and after the treatment. The pre-test score on each variable would be used as a predictor or control measure and the post-test score as a criterion measure. The slopes and intercepts of regression lines can be compared for experimental and control groups.

Data may be obtained from experiments in Chicago, Detroit, and elsewhere where a great deal of independent reading is done. There is a further measure available in that most of these schools have bookstores and a record can be kept of how many books students buy.

The following are some of the hypotheses that might be tested:

Increase in tentativeness--greater willingness to say "it depends"

Increase in tolerance--acceptance of unstereotyped situations and outcomes

Increase in aesthetic values (possibly by use of an instrument such as the Allport-Vernon Study of Values)

Increase in receptiveness to the improbable, e. g., fantasy

Measures of these would be supplemental to measures of change in the cognitive processes. The most general measure, of course, would be improvement in grades in English courses and in general school program.

There are also measures of cognitive styles (e. g., field independence) which might be taken into account.

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Norman Frederiksen, Harold Martin

An experimental program is already in existence to increase the amount of free reading. The influence of increases in the amount of free reading upon the variables outlined above could be determined.

The control groups will be composed of students who are initially similar in ability and reading habits to those in the experimental groups. The sampling would be by schools.

No. 9

HOW CAN WE MEASURE THE EFFECTIVENESS OF CONFERENCE OR CLASS?*

First of all, we would like to observe that the success of any research in teaching, or in the substantive learning and use of language, depends first upon how specifically the "treatment" (i. e., the methods and materials) and conditions are specified. They must be stated so specifically that they can be replicated for verification by various researchers at different times and in different places. With these criteria in mind, we suggest that an experiment might be designed somewhat as follows to test the effectiveness of the conference versus the regular class.

Classes by the same teachers could be divided into four groups (25 students in each group might be sufficient to provide reliable data):

1. Group 1 would receive theme assignments in class, with adequate discussion and specific directions, and their themes would be marked in the usual way, with comments as to the success with which they fulfilled the assignment. They would be directed to revise their themes in accord with the comments.

2. Group 2 would each have a short conference with the teacher focused on the specific questions and interests of the individual students in the assignment, in which the assignment would be made sharper and more specific. Their themes would be marked in the usual way, and they would be asked to revise in accordance with the comments.

3. Group 3 would receive the assignment only in class, but would have a short conference with the teacher over the corrected theme in which their success and failure would be assessed, and they would be asked to revise in the light of this conference.

4. Group 4 would have the class meetings, and both the assignment and evaluation conferences, and be asked to revise.

The themes would be evaluated according to the procedures set forth in Paul Diederich's outline, to see which group made the most evident progress.

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In addition, a questionnaire would be devised to see what courses the student wanted to take the next year. This would be designed to see which group was most favorably impressed by its work in English.

An analysis of variants would permit one to judge how much of the final result was due to assignment conference, evaluation conference, or interaction between the two.

No. 10

AN APPROACH TO ANALYSIS OF BASIC CONCEPTS*

"English" as it is currently taught seems to have no structure. Current psychological thinking indicates that awareness of structure aids learning and retention. In order to improve the teaching of English, therefore, we ought to determine meaningful structures for literature, composition, and language, and develop from them sequential curricula for the teaching of literature, composition, and language. Furthermore, sequential curricula would preclude the current practice of trying to teach everything (or, at any rate, too much) in any given year.

Before we develop proper sequential curricula for the teaching of English, we must first identify the basic concepts of English and then determine the order in which these can best be learned. There are three different levels involved here: the structure of the curriculum; the structure of the subject matter; and the concepts upon which the structure of the subject matter is based.

"Concept" is used here to mean a term, principle, or idea which is central to a discipline or body of knowledge, and which once introduced continues to serve as an organizing idea around which the essential structure of the discipline can be developed. Thus, a concept is the sapling out of which the tree expands and grows. The concept continues to serve as the supporting idea for subconcepts involving more sophisticated levels of understanding. A concept therefore should be stated in such a way that it will not at a later stage be contradicted or repudiated. Thus prior to developing a curriculum to teach writing, one should make a study of rhetoric. The investigators should

1. examine systematic rhetorical analyses (text books of rhetoric)

2. analyze the rhetorical concepts used in teaching at different levels

    a. those the teacher is consciously seeking to develop

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    b. those that develop in the discussion that may not be consciously sought by the teacher or may not even ever be made emphatic

3. determine what rhetorical principles people use when they write
    a. Have students keep records
    b. Have people tell what they did after they have written something
    c. Analyze what authors have written about how they write
    d. Observe people when they write, (Piaget approach).
4. compare the results of 1, 2, 3, (above); and prepare a definitive list of functional rhetorical concepts. To be most useful these concepts ought then to be organized into meaningful groups at different levels of abstraction so that at the highest level there would not be more than five or six basic groups.

One of the problems will be to discover those concepts that not only are basic in terms of a logically organized theory of rhetoric, but also basic in terms of the child's difficulties in using language to organize experience and to communicate. The concept of "fiction" or "imaginative" utterance, for example, is one that many youngsters assimilate quickly, in rudimentary form, but many others have to be helped with. Is it "true" or "make believe"? This concept of fictionality still may trouble the college student, who often reacts to a character in a novel literally as he would in life, rather than seeing the function of that character in the total structure of the novel (for example, the girl who simply sits in judgment on Anna Karenina, instead of attending to the insights to be derived from the interplay of characters.)

Similarly, other concepts actually are a means of organizing the elements of experience or data in meaningful or systematic ways: awareness of relationships such as time-sequence, cause-and-effect, similarity or difference, are guidelines for us as we prepare to use language to order data. Awareness of a time-sequence leads, for example, to systematic or clear narration of a series of events.

The investigators should have:

1. a limited number of key or basic concepts expressible in simple language for early introduction

2. additional concepts which may be new or which may be verbal expressions of increasingly sophisticated elaborations of the basic concepts or of relations among these.

They would then move to:

3. an identification of successive levels of insight or understanding of the concepts and determination of when and how these should be introduced into the curriculum.

Having determined the basic concepts, the investigators--or others--must thus use them to build courses and curricula. Let us assume that one of the basic concepts is organization. Kindergarten children can be taught the basic concept inductively by means of tinker toys (color), blocks (sizes or shapes), children in the class (height or sex), etc.

When the children get to first grade and begin to deal with words and sentences, these can be approached by the concept of organization; words are organized into sentences. When they move, then, to phonetics, they can learn that words are organized from groups of discrete sounds.

Farther along in the grades, the concept of a subordination, for example, can be approached through organization: ideas within a sentence are organized in terms of their importance and relation to one another. Thus, various shades of causality are indicated by because, since, and although; temporal relationships are indicated by when and whenever; etc.

The next higher step would be to use the concept of organization to teach paragraphs.

A higher level use of the concept of organization would be to develop a sense of the relationship of paragraphs to one another in a piece of writing or an essay. The rhetorical concept, paragraph, would then rest on the foundation of a broader and more basic concept.

In building courses and curricula, we thus can utilize the basic concepts at increasing levels of sophistication or complexity. The problem is to determine the meaningful degree of complexity appropriate to each grade or maturational level. For each of the kinds of language activity--speaking, writing, reading--it would be necessary to develop appropriate exercises and procedures and to select appropriate literary materials, that would enable the students to re-discover the basic concepts at a higher level or would enable them to utilize the concept as a means of entering into increasingly complex linguistic situations.

No. 11

SURVEY AND CRITIQUE OF MEASUREMENTS IN THE FIELD OF ENGLISH TEACHING*

A. Functions to be measured (longitudinally):

1. Learning of phonology (phonemic discrimination and production);

2. Vocabulary: size, diversity, special areas; multiple meanings; skill in discrimination of meanings and in choice of words to fit a context.

3. Grammar: sentence and phrase patterns; problems of usage; "grammatical sensitivity."

4. Listening behavior: in relation to rate, complexity, and content of utterances.

5. Reading: speed, comprehension; responses to phonic (grapheme) cues.

6. Speaking: oral production; fluency, rate, characteristics, style.

7. Handwriting

8. Spelling

9. Composition

10. Literary knowledge and appreciation.

11. Other functions to be determined by factor analytic studies.

B. Data to be assembled for each function as listed above:

1. Survey of available standardized and unstandardized measuring instruments. Sources: Buros' Tests in Print, Mental Measurements Yearbooks, research literature in education, psychology, linguistics.

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*By John Carroll

2. Critique from the following points of view:

    a. Measurement characteristics: reliability, objectivity, validity, standardization, scaling, practicability, factorial composition.

    b. Adequacy in the light of contemporary concepts of language.

3. Survey of use of these instruments and results obtained: intercorrelations.

C. End-products

1. Publication of a book or monograph summarizing results of the survey, and containing (in effect) a handbook or compendium for the teacher and the research worker.

2. Identification of areas in which better measuring instruments are needed, and suggestions for research.

No. 12

MODEL 1 FOR MEASUREMENT OF GROWTH IN WRITING*

1. About the first of each month from September to June, all classes in all curricula in a span of three grades will write a short paper in class in a standard $8\frac{1}{2}$ x 11 four-page folder with lines spaced $\frac{1}{2}$" apart for easy insertion of corrections (by students). On each occasion all students will write on the same topic, but on ten different topics in the course of the year and on thirty in three years. Most of the topics should deal with common student experiences, such as "There's Nobody like _______________" (a friend, enemy, or relative), but some may ask a question about a book or short story, broad enough so that each student may write about one that he has read recently. Each student will number his own papers with a self-chosen number of six digits, such as 409017, and will write no other identification on the paper. He will copy this number on a 3 x 5 card, and add his name, school, teacher, grade, curriculum, and the date. The cards will remain in the possession of the department head until the grading is finished.

2. The department head will sort these papers into as many piles as there are readers. For example, if there are ten readers, each pile will contain a tenth of the papers handed in by each class. If the papers are first mixed together and dealt out completely at random, some readers may get an undue proportion of papers from higher grades and more exacting curricula, and these students will get lower grades than if each pile fairly represents the whole school.

3. Each reader will grade these papers at home without knowing who wrote them or what grade, curriculum, or teacher they represent. He will fill in something like the appended rating form for each paper and will write nothing at all on any paper. When he finishes, he will return both the papers and the rating forms to the department head and will get from him a second set of papers that have already been graded by someone else. He will not be told who graded them previously and will not see this person's ratings. It will probably be too much trouble to make sure that each student's work is judged by a different pair of readers on each testing occasion, but if a random tenth (or whatever) from each class goes into each pile, and if these piles are assigned at random to readers, it is likely that each student's work will be judged by most of the available readers in the course of the year.

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*By Paul B. Diederich

4. The sum or average of points given by all readers to all ten papers written by each student is to count as his score in writing for the year. Twenty judgments will make up this total: two independent judgments of each of ten papers written at intervals of once a month. The overall reliability of this total score will probably be above . 80. The average for each grade, curriculum, and treatment will then be computed. It will be found that the curricula differ in average scores, and within each curriculum average scores go up from one grade to the next. The various experimental treatments can then be studied against this background of normal growth. If average growth in a given curriculum is 20 points, but Treatment A yields 30 points and Treatment B 50 points, the last probably has something to recommend it. Comments written on the rating forms may indicate what the superiority was.

RATING FORM FOR TEST PAPERS

Topic #_____ Paper #_______ Reader #________ Date________________

Indicate standing in this set of papers by encircling

1 low 5%	2 next fifth	3 middle half	4 next fifth	5 top 5%
Weak	Passing	Good	Superior	Exceptional

First impression of general merit	(1)	1	2	3	4	5
Richness and soundness of ideas	(2)	1	2	3	4	5
Development and support of ideas	(3)	1	2	3	4	5
Relevance of ideas to topic & purpose	(4)	1	2	3	4	5
Form: organization & analysis	(5)	1	2	3	4	5
Flavor: style, interest, sincerity	(6)	1	2	3	4	5
Choice and arrangement of words	(7)	1	2	3	4	5
Grammar and usage	(8)	1	2	3	4	5
Punctuation, capitalization, etc.	(9)	1	2	3	4	5
Spelling	(10)	1	2	3	4	5

Strength or promise SUM_________

Suggestions, questions, comments:

No. 13

TOWARD A MEASUREMENT OF GROWTH IN LITERARY COMPREHENSION

1. Let a university request a grant of approximately $100, 000 to prepare, pretest, review, norm, publish, and distribute objective examinations on fifty or more literary works that are commonly studied in grades 7-12 or are recommended by the National Council for such use. Let the university farm out the preparation of test items whenever a teacher-scholar-testwriter elsewhere is better qualified than its own staff to deal with a particular work. An honorarium of something like $500 might be paid for the initial preparation of items and honoraria of $100 to two or more peers to review the testwriter and work out a final form. For some works there might be two final forms: an easy form for students of lower ability, consisting of items that from 60% to 90% of the national sample answered correctly, and a harder form, consisting of items that from 30% to 60% answered correctly. The minimum biserial might be .30 and the average at least .45. The questions should merit the respect of scholars, but be tempered to the capacity of students. The distribution of questions by types should be scrutinized to prevent undue emphasis on purely factual questions, historical or biographical trivia, identification of figures of speech, and other common substitutes for understanding.

2. These examinations might be normed by some such procedure as paying $2 to two randomly selected students in each of 200 schools to take each examination under supervision on school time. A large number of examinations might thus be normed simultaneously in these schools, each under the supervision of a single proctor who would receive a small honorarium. Each student should be given a copy of the work assigned to him and should be allowed to use it during the examination. He should be directed some time in advance to read this work and should not be admitted to the examination unless he finished it, but he should read it on his own without direct teaching or coaching. He might be allowed to ask questions about points he did not understand and teachers might be allowed to answer, provided they did not stray beyond questions initiated by the student. These examinations are to test understanding of these works after a first reading by the student, prior to any teaching.

3. Any teacher thereafter who orders copies of these examinations for his classes should be required to sign a statement that they will not be used as posttests, after teaching. He must promise that they will be

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*By Paul B. Diederich

used only as pretests after students have read the work through once on their own without any direct teaching or coaching. He will be allowed something like twenty minutes to introduce the work (in order to generate enough interest to get it read) and as much time later on to answer questions, but will not be allowed to ask questions about the work or volunteer information. To violate these rules would be to direct teaching toward a specific set of questions. If the rules are observed, progress from the fortieth to the sixtieth percentile of the national sample in successive works would indicate growth in ability to read and understand important literary works on one's own. These professional examinations would also open the eyes of both teachers and students to the kinds of questions that a skilled reader would ask. In some cases additional essay questions might be asked and sample answers of various degrees of excellence might be provided. Possibly the essay questions might be used as posttests.

No. 14

INVENTORIES OF MECHANICAL ERRORS*

Educational Testing Service recently prepared ten forms of an Inventory of Mechanical Errors (Grammar, Usage, Punctuation) covering 580 errors that occurred twenty times or more in 20,000 freshman themes, and ten forms of an Inventory of Spelling Errors covering 1,000 correct and incorrect spellings of words in the Pollock list, based on 31,375 misspellings. The first student in each class took Form 1, the next Form 2, and so on, and the percentage of students who failed to detect each error was reported.

The Mechanics Inventories embodied each error in a sentence and broke up the sentence into three lines of equal length, making sure that the whole error (if any) lay within one of the three lines. Students were to mark the line that contained an error, or 0 if there was no error. The Spelling Inventories listed the correct and incorrect spellings without context and students marked each spelling R (right) or W (wrong).

Nearly all these "errors" would be regarded as non-standard in any system, but a few were included for our own information. For example, we used "contact" as a verb in a formal context; something like "Dean Walters asked me to contact him in regard to my grade on the English examination." Only 2% of the students found anything wrong with this sentence, so we regarded our struggle with "contact" as a lost cause (as is the use of "so" just illustrated).

The original inventories included several instances of each type of error in varied contexts to preclude the possibility that some quirk in our sentences accounted for the failure to detect the error. The ten forms were so cumbersome, however, that we have now reduced them to two forms on Grammar and Punctuation, two forms on Usage, and two forms on Spelling. Only one or two instances of each type of error are now included. Debatable items have been dropped. The cut-off point was that each item we retained was missed by at least 10% in grade 12 and by at least 25% in some other grade. Each Inventory can be administered in about 30 minutes, but Spelling takes only 10 minutes. One form is intended as a pretest, the other as a posttest. They are strictly parallel.

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*By Paul B. Diederich

Many non-selective colleges, especially junior colleges, devote a great deal of time in freshman English to the eradication of these errors. They can measure the relative effectiveness of various methods by administering the revised inventories before and after instruction. Study of handbooks and red-inking errors in student themes appear to have little effect. Note the very gradual reduction of errors in a good public high school:

AVERAGE PERCENT WRONG
(answered incorrectly)

Grade	9	10	11	12	Gain
Usage (four-choice items)	45%	42%	38%	37%	8%
Grammar and Punctuation (four-choice items)	44%	41%	38%	35%	9%
Spelling (two-choice items--right or wrong)	23%	19%	17%	16%	7%

By the methods now in common use, these errors decline (in this sense) at the rate of 2% per year. They would probably decline as rapidly from age 14 to age 17 if the teachers did nothing at all.

VI. CODA

The term "Conclusion" seems inappropriate for a conference such as this, which opened up an interdisciplinary dialogue that, it is hoped, will continue and broaden. No general agreements or formulae were sought. Bringing together specialists in English and experts in research methods to work on the potentialities and pitfalls of devising research in English teaching was to some degree a pioneering venture. This report has served to reflect the many subjects discussed, the various points of view, the many suggestions made, and to transmit the proposals for research. The main impression produced by a review of the transcriptions of the sessions is of an absence of narrow dogmatism. An opening-out, rather than a narrowing, process is apparent. If no easy answers were proffered, there is yet a sense of paths opening into a field still largely uncharted.

In this meeting, the stereotype of the educational research expert, imposing his quantitative methods with Procrustean rigidity, was as irrelevant as the stereotype of the English scholar interested only in the intangible and the intuitive. What emerges is rather the canvassing of a variety of research approaches and designs, ranging from the case study and descriptive studies to the fully accoutered controlled experiment. There was a flexible approach, also, to the matter of the scope of research projects. The value of many well-designed pilot studies, generating hypotheses for possible further testing, was recognized as well as the possibility that the time might be ripe for large-scale answers to some questions.

Implied, of course, is the need for more general understanding in the English profession of the value and limitations of different research designs. This becomes a prerequisite for wise planning of research and for discriminating use of its findings. Such a substratum of knowledge and informed "lesser" investigations could raise the level of the whole research enterprise in English teaching.

The emphasis on "basic research" in this context of concern about teaching was especially fertile. If research in the teaching of English--as in the field of reading, or in studies of grammar and writing--has not always produced very significant results, this, it was recognized, might be due to a lack of clarity within the profession itself concerning the nature of the language or the structure of the discipline. Here, as in the natural sciences, it seems important to carry on, parallel with "applied research," a strong current of inquiry into basic questions.

Again, the suggestions made in the seminar permit the view that such fundamental rethinking should be carried on in a great many areas and on many different levels. A more precise understanding of outcomes aimed at, of processes being fostered, of the relations of one area of the discipline to the other, will result. From a more general and energetic concern with such basic questions should flow a stream of fresh hypotheses and more and more precisely-tempered research problems.

Another noteworthy interest of the seminar involves the field of measurement. This problem of the development and evaluation of measurement instruments is, of course, crucial, and requires the imagination and inventiveness of many members of the profession. Also, much basic research, such as has been suggested in linguistics, stylistics or rhetoric, should be relevant to the clarification of what is to be measured.

More important than any specific aspects of the seminar was its indication of the need for continuing interdisciplinary cooperation. A group of specialists, of extremely diverse training and mental habit, had together pondered some of the ways in which research might contribute toward the current movement for the improvement of instruction in English in this country. The very range, complexity, and subtlety of the problems encountered demonstrate that the task deserves the attention both of specialists in educational research and of the whole English profession.